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The Irrational Supreme Court

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I. INTRODUCTION

The pejorative “irrational” is used to describe many different defects in legal reasoning. If taken literally, it is an accusation that legislators who pass an irrational law or judges who agree to an irrational opinion are “not endowed with reason or understanding,”¹ or are “void of reason or understanding; as, brutes are irrational animals.”² When the Supreme Court strikes down a law using the “rational basis” test, though, the criticism of the legislature is neither that personal nor that extreme.³ In applying the requirement that a

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1. MERRIAM-WEBSTER ONLINE DICTIONARY, <http://www.m-w.com/cgi-bin/dictionary?book=dictionary&va=irrational> (last visited Feb. 14, 2006).
2. THE ON-LINE MEDICAL DICTIONARY, <http://cancerweb.ncl.ac.uk/cgi-bin/omd?irrational> (last visited Feb. 14, 2006).
3. The first time the Supreme Court used the phrase “rational basis” in a constitutional test was 1914, when it declared, “The State has a wide range of discretion with respect to establishing classes for the purpose of imposing revenue taxes, and its laws upon the subject are not to be set aside as discriminatory unless it

"classification drawn by the statute is rationally related to a legitimate state interest,"⁴ the concept of rationality is not meant to be taken at face value.

In reality, the conclusion of "irrationality" reflects a wide range of possible disagreements. It is not uncommon, for example, for a Supreme Court Justice to describe as "irrational" a situation where he or she believes that two actions cause the same problem, but only one is prohibited. Take Justice Stevens, who said it was "simply irrational" for a state to ban partial birth abortion procedures yet permit other forms of abortion which were "equally gruesome."⁵ Similarly, Justice O'Connor termed the use of different standards of proof for committing the mentally ill than for committing the mentally retarded "irrational."⁶

Other times, Justices have used the word "irrational" to criticize decisions which they see as self-contradictory, such as permitting actions which cause the very harm sought to be prevented. Justice Scalia found it "irrational" that "seeking to harm an abortion clinic's business through persuasion is indeed unlawful in South Carolina," yet a court issued an injunction that would "permit such harm so long as it is inflicted at a distance of 12 feet from the driveway[.]"⁷

Still another use of the word "irrational" describes situations where there is no reasoning at all to support a decision. Thus, the Court has stated that regulation of even non-fundamental rights can violate the Due Process Clause when the restrictions imposed are "undeniably irrational as unsupported by any imaginable rationale."⁸

Most people would agree that, absent some other facts, it is irrational to treat functionally similar cases differently, or to permit the

clearly appears that *there is no rational basis for the classification.*" *Singer Sewing Mach. Co. v. Brickell*, 233 U.S. 304, 316 (1914) (emphasis added). The Court's first use of the word "rational" in a constitutional standard was four years earlier in *Mobile, Jackson & Kansas City Railroad Co. v. Turnipseed*, 219 U.S. 35 (1910): "That a legislative presumption of one fact from evidence of another may not constitute a denial of due process of law or a denial of the equal protection of the law, it is only essential that there shall be some *rational connection* between the fact proved and the ultimate fact presumed . . ." *Id.* at 43 (emphasis added).

4. *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 440 (1985).

5. *Stenberg v. Carhart*, 530 U.S. 914, 946 (2000) (Stevens, J., concurring).

6. *Heller v. Doe*, 509 U.S. 312, 334 (1993) (O'Connor, J., concurring in the judgment in part and dissenting in part).

7. *Cloer v. Gynecology Clinic, Inc.*, 528 U.S. 1099, 1101 (2000) (Scalia, J., dissenting).

8. *Washington v. Glucksberg*, 521 U.S. 702, 766 (1997) (Souter, J., concurring); see also *Bush v. Vera*, 517 U.S. 952, 1031 (1996) (Stevens, J., dissenting) ("[I]t is irrational to assume that a person is not qualified to vote or to serve as a juror simply because she has brown hair or brown skin. It is neither irrational, nor invidious, however, to assume that a black resident of a particular community is a Democrat if reliable statistical evidence discloses that 97% of the blacks in that community vote in Democratic primary elections.").

very harm you are trying to prevent, or to act without the slightest justification. While these principles may not be controversial, deciding when they have occurred will usually be contentious. What appears to be irrationally differential treatment to one person may well be viewed as a valid distinction to another. For example, in *Romer v. Evans*,⁹ the Supreme Court ruled that an amendment to the Colorado Constitution prohibiting all state and local bans of discrimination against gays and lesbians violated the Equal Protection Clause. Justice Anthony Kennedy, speaking for the Court, noted the law's "sheer breadth is so discontinuous with the reasons offered for it that the amendment seems inexplicable by anything but animus toward the class it affects; it lacks a *rational* relationship to legitimate state interests."¹⁰ By contrast, Justice Antonin Scalia argued in dissent that the law was indeed rational:

If it is *rational* to criminalize the conduct, surely it is *rational* to deny special favor and protection to those with a self-avowed tendency or desire to engage in the conduct. Indeed, where criminal sanctions are not involved, homosexual "orientation" is an acceptable stand-in for homosexual conduct.¹¹

Justices frequently disagree over whether a decision is supported by a legitimate rationale or not. To term a decision "irrational" in this setting is really a subjective determination. It is more of a statement that, "I disagree with the validity of your premise," or "I disagree with your belief that a given conclusion follows from a particular premise." This is far less insulting, and more likely accurate, than a literal charge of irrationality which implies, "No logical person could agree with your reasoning process."

Perhaps the most obvious example of "irrationality" would be to declare simultaneously that something both did and did not exist, or that a proposition is simultaneously true and not true.¹² Nonetheless, decision-makers sometimes willfully create such contradictory decisions in order to avoid the consequences of consistency. Consider the case of a prohibition-era jury finding a defendant not guilty of unlawful possession of six glasses of bootleg liquor, but guilty of maintaining a nuisance by keeping those same six glasses of liquor for sale.¹³ Ac-

9. 517 U.S. 620 (1996).

10. *Id.* at 632 (emphasis added).

11. *Id.* at 642 (Scalia, J., dissenting) (emphasis added). The Supreme Court ruled that it was not rational to criminalize homosexual activity in *Lawrence v. Texas*, 539 U.S. 558, 578 (2003).

12. This is comparable to the rule of logic known as "the law of the excluded middle," which states that a given proposition is either true or untrue. STEPHEN F. BARKER, *THE ELEMENTS OF LOGIC* 120 (3d ed. 1980); see also, e.g., *Tesoro Petroleum Corp. v. State*, 42 P.3d 531, 545 (Alaska 2002) (Mathews, J., dissenting) (stating that a worker performing a single task cannot be both an employee and an independent contractor); *Carbon County v. Union Reserve Coal Co.*, 898 P.2d 680, 686 (Mont. 1995) (stating that "coal and gas are mutually exclusive terms").

13. *Dunn v. United States*, 284 U.S. 390 (1932).

cording to Oliver Wendell Holmes, the verdicts were inconsistent, but could be explained under the theory that the jury was deliberately voting so as to be lenient to a defendant they believed was guilty:

The most that can be said in such cases is that the verdict shows that either in the acquittal or the conviction the jury did not speak their real conclusions, but that does not show that they were not convinced of the defendant's guilt. We interpret the acquittal as no more than their assumption of a power which they had no right to exercise, but to which they were disposed through lenity.¹⁴

Irrespective of the judge's instructions and the obvious illogic, the jury essentially manipulated the system so that a guilty party was punished, but not too severely. The irrationality of inconsistent verdicts then was not a failure of logic, but a deliberate device to reach a desired end. Theoretically at least, such "illogic" can be avoided by employing special verdicts, or by requiring that a jury deciding multiple counts only convict a defendant on a compound crime if it convicts on the predicate offense as well.¹⁵ However, because jury manipulation is not the sole source of irrational outcomes, these devices cannot prevent illogical judgments entirely.

Irrationality also results from simple human error. The Supreme Court was probably guilty of this type of irrationality when it decided a trilogy of cases involving the applicability of the First Amendment to private shopping centers. In the 1968 decision of *Amalgamated Food Employees Union Local 590 v. Logan Valley Plaza, Inc.*,¹⁶ the Court ruled that a labor union had a First Amendment right to picket within a privately owned shopping center.¹⁷ Four years later in *Lloyd Corp. v. Tanner*,¹⁸ without overruling *Logan Valley*, the Court held that anti-war protesters did not have a First Amendment right to distribute handbills in a private shopping center.¹⁹ Since the First Amendment's principle of content-neutrality suggests the Court should have permitted both types of speech or else permitted neither, these cases were in direct conflict with each other. Another four years later, in *Hudgens v. NLRB*,²⁰ the Court formally overruled *Logan Valley*, admitting: "[T]he reasoning of the Court's opinion in *Lloyd* cannot be squared with the reasoning of the Court's opinion in *Logan Valley*

14. *Id.* at 393 (quoting *Steckler v. United States*, 7 F.2d 59 (2d Cir. 1925)); see also *United States v. Powell*, 469 U.S. 57 (1984) (jury acquitting defendant of possessing two kilograms of cocaine, but finding him guilty of using the telephone to possess the same two kilograms of cocaine).

15. For an excellent article on inconsistent verdicts, see Eric L. Muller, *The Hobgoblin of Little Minds? Our Foolish Law of Inconsistent Verdicts*, 111 HARV. L. REV. 771 (1998).

16. 391 U.S. 308 (1968).

17. *Id.* at 318.

18. 407 U.S. 551 (1972).

19. *Id.* at 561-67.

20. 424 U.S. 507 (1976).

.... [W]e make clear now, if it was not clear before, that the rationale of *Logan Valley* did not survive the Court's decision in the *Lloyd* case."²¹

Again, in an idealized world such inconsistencies could be avoided. If the Court was candid about what it was doing, it would dispense with inconsistent prior decisions by overruling them explicitly. Unfortunately, even in an idealized world populated by perfectly rational people not all causes of irrational decision-making can be avoided. The basic nature of group decision-making inevitably creates the possibility of certain kinds of irrationality.²²

The particular situation where a set of group-made decisions would be deemed irrational had they been made by the same individual is known as "collective irrationality."²³ This can happen even though each individual participant behaves rationally. To understand how "collective irrationality" infects the Supreme Court, it is necessary to remember that when the Court hands down an opinion, that opinion reflects the results of two different votes. The first is the judgment, that is, which party prevails. This vote takes place at the weekly conference of the Justices, with each Justice voting for a particular judgment, after a (usually brief) discussion of the merits of the case.²⁴

The second vote is on the opinion explaining the reasoning that supports the judgment. The reasoning consists of the resolution of the relevant issues raised by each party in their arguments. The vote by the Court on the opinion is not a formal vote; rather, it occurs after an opinion is drafted and circulated among the Justices.²⁵ Each Justice decides individually whether to join that opinion, join only in the judgment and file a concurring opinion, or dissent from the judgment.²⁶ If a majority of the voting Justices join an opinion, it becomes the opinion of the Supreme Court.

Because there are generally only two choices for a judgment—plaintiff wins or defendant wins—the vote as to the appropriate judg-

21. *Id.* at 518.

22. The field of "social choice" explores the ways in which group decision-making can lead to a set of results which would be irrational were they made by a single individual. See, e.g., David Luban, *Social Choice Theory as Jurisprudence*, 69 S. CAL. L. REV. 521, 521 (1996) ("Social choice theory studies the most basic question of democratic politics and welfare economics: How should the preferences of many individuals be amalgamated into a single social choice?"). See generally Michael Abramowicz & Maxwell L. Stearns, *Beyond Counting Votes: The Political Economy of Bush v. Gore*, 54 VAND. L. REV. 1849, 1906–09 (2001).

23. See KENNETH J. ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* 3 n.4 (1951).

24. See, e.g., DAVID M. O'BRIEN, *STORM CENTER* 293–96 (3d ed. 1993).

25. See, e.g., *id.* at 314–28.

26. See, e.g., *id.* at 335–46. There are numerous permutations as well. A Justice can sign a majority opinion and file a concurring opinion. That will not detract from the main opinion reflecting the majority's choice. Alternatively, a Justice could sign onto part of a majority opinion and dissent from the rest.

ment in the case almost always results in a majority decision.²⁷ Conversely, it is common for there to be multiple issues decided in any given case. Thus, there are multiple opportunities for disagreement among the Justices as to the appropriate rationale for reaching a particular judgment. It is this fact which creates the possibility of irrational decision-making.

The task of creating a system for selecting among multiple options presents an intractable problem for any group, including the Supreme Court. If there are only two options for a group decision, a majority vote can readily select between the alternatives. In the case of an odd number of voters, as with nine Justices, one of the two options must receive more votes than the other, and that choice can rightfully be deemed the decision of the group. If there are three alternatives, however, there is no guarantee that one option will receive a majority of the votes cast. For centuries, theorists have tried, without success, to figure out the best way to treat a group decision where the votes are divided in such a way that no single choice captures more than half of the vote.

One such theorist, Nobel Prize winning economist Kenneth S. Arrow, has proven that no reasonable group-voting system for resolving multiple issues can avoid all inconsistency. Specifically, Arrow showed that under certain conditions, there always exists the potential for what is known as a "lack of transitivity." Transitivity requires that preferences between several options be consistent, so that if one prefers coffee to soda, and soda to tea, that person also prefers coffee to tea. Given a choice of all three beverages, that person would choose to drink coffee. Arrow's Theorem establishes that such a conclusion does not necessarily follow in the context of group decision-making. That is, given a similar choice of the three beverages, the group might prefer coffee to soda, and soda to tea, but also prefer tea to coffee. While the scholarly discussion of Arrow's Theorem is voluminous,²⁸

27. There are actually more than two "results"—affirm; reverse and remand; and reverse and dismiss. In practical terms, though, the Court is usually faced with the choice of affirm or reverse. In each of those rare cases where there are three options and no majority in favor of any disposition, a Justice changed his vote to create a majority. *See, e.g.,* *Screws v. United States*, 325 U.S. 91, 134 (1945) (Rutledge, J., concurring) (stating he would have preferred to affirm the judgment of the lower court, but was voting to create a majority in favor of "reverse and remand," rather than outright reversal).

28. *See, e.g.,* DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE* 38–42 (1991); DENNIS C. MUELLER, *PUBLIC CHOICE* II 82–86 (1989); WILLIAM H. RIKER, *LIBERALISM AGAINST POPULISM: A CONFRONTATION BETWEEN THE THEORY OF DEMOCRACY AND THE THEORY OF SOCIAL CHOICE* 18 (1982); Lynn A. Baker, *Direct Democracy and Discrimination: A Public Choice Perspective*, 67 *CHI-KENT L. REV.* 707 (1991); Cheryl D. Block, *Truth and Probability—Ironies in the Evolution of Social Choice Theory*, 76 *WASH. U. L.Q.* 975, 975–81 (1998); Frank H. Easterbrook, *Ways of Criticizing the Court*, 95 *HARV. L. REV.* 802, 813–14 (1982); Saul

until now, no one has identified a lack of transitivity in Supreme Court opinions. This Article presents the first such example, but it also explains why Arrow's Theorem is not a significant cause of "irrational" Supreme Court opinions.

However, a second form of irrational group decision-making exists, which has occurred far more frequently and has only recently begun to receive significant scholarly attention.²⁹ It occurs when one party in a case receives the votes of a majority of the Justices of the Court on every relevant issue yet loses the case anyway. In these cases: (i) the Court agrees that if all of the relevant issues are decided in one party's favor, that party will win; (ii) at least five of the nine Justices rule in favor of that same party on all relevant issues; but, (iii) the other party wins.³⁰ This phenomenon can be explained using what this Author has termed the "Irrationality Theorem." Stated generally, the Ir-

Levmore, *Parliamentary Law, Majority Decisionmaking, and the Voting Paradox*, 75 VA. L. REV. 971, 987-88 (1989); William T. Mayton, *The Possibilities of Collective Choice: Arrow's Theorem, Article I, and the Delegation of Legislative Power to Administrative Agencies*, 1986 DUKE L.J. 948, 950-52 (1986); Richard H. Pildes & Elizabeth S. Anderson, *Slinging Arrows at Democracy: Social Choice Theory, Value Pluralism, and Democratic Politics*, 90 COLUM. L. REV. 2121, 2131-62 (1990); Kenneth A. Shepsle, *Congress Is a "They," Not an "It": Legislative Intent as Oxymoron*, 12 INT'L REV. L. & ECON. 239, 249 (1992); Maxwell L. Stearns, *Standing Back From the Forest: Justiciability and Social Choice*, 83 CAL. L. REV. 1309, 1329-50 (1995).

29. See, e.g., MAXWELL L. STEARNS, CONSTITUTIONAL PROCESS: A SOCIAL CHOICE ANALYSIS OF SUPREME COURT DECISION MAKING 111-24 (2000) [hereinafter STEARNS, CONSTITUTIONAL PROCESS]; Abramowicz & Stearns, *supra* note 22, at 1849; Evan H. Caminker, *Precedent and Prediction: The Forward-Looking Aspects of Inferior Court Decisionmaking*, 73 TEX. L. REV. 1 (1994); Edward A. Hartnett, *A Matter of Judgment, Not a Matter of Opinion*, 74 N.Y.U. L. REV. 123 (1999); Lewis A. Kornhauser & Lawrence G. Sager, *The One and the Many: Adjudication in Collegial Courts*, 81 CAL. L. REV. 1 (1993) [hereinafter Kornhauser & Sager, *The One and the Many*]; Lewis A. Kornhauser & Lawrence G. Sager, *Unpacking the Court*, 96 YALE L.J. 82 (1986) [hereinafter Kornhauser & Sager, *Unpacking the Court*]; Jonathan Remy Nash, *A Context-Sensitive Voting Protocol Paradigm for Multi-member Courts*, 56 STAN. L. REV. 75 (2003); David G. Post & Steven C. Salop, *Issues and Outcomes, Guidance, and Indeterminacy: A Reply to Professor John Rogers and Others*, 49 VAND. L. REV. 1069 (1996); David G. Post & Steven C. Salop, *Rowing Against the Tidewater: A Theory of Voting by Multijudge Panels*, 80 GEO. L.J. 743 (1992) [hereinafter Post & Salop, *Rowing Against the Tidewater*]; John M. Rogers, *"Issue Voting" by Multimember Appellate Courts: A Response to Some Radical Proposals*, 49 VAND. L. REV. 997 (1996) [hereinafter Rogers, *Issue Voting*]; John M. Rogers, *"I Vote This Way Because I'm Wrong": The Supreme Court Justice as Epimenides*, 79 KY. L.J. 439 (1991) [hereinafter Rogers, *I Vote This Way*]; Maxwell L. Stearns, *Should Justices Ever Switch Votes?: Miller v. Albright in Social Choice Perspective*, 7 SUP. CT. ECON. REV. 87, 127-28 (1999) [hereinafter Stearns, *Should Justices Ever Switch Votes*]; Maxwell L. Stearns, *How Outcome Voting Promotes Principled Issue Identification: A Reply to Professor John Rogers and Others*, 49 VAND. L. REV. 1045 (1996).
30. This sort of irrationality has been variously termed a "doctrinal paradox," see, e.g., Kornhauser & Sager, *The One and the Many*, *supra* note 29, at 10-18, and a

rationality Theorem proves that there is no way to eliminate the possibility that a majority of the Supreme Court (or any other multi-member tribunal) will vote that one party should lose on every relevant issue in a case yet win the case anyway. Several cases embodying this irrationality are discussed in detail below.

II. A [blunt?] ARROW AIMED AT THE HEART OF THE SUPREME COURT

When a group votes on more than two items, there is no guarantee that a majority will favor one position. Even more troublesome, the option that gets the most votes might actually be the one most strongly opposed by a majority. For example, an extremist candidate with forty percent of the vote might defeat two moderate candidates who split the remaining vote, even though sixty percent of the electorate would prefer either of the two losing candidates.

One solution to the effects of such elections was proposed by the eighteenth-century French mathematician Marie-Jean-Antoine-Nicolas Caritat de Condorcet. Condorcet, who was a friend of both Thomas Jefferson and Benjamin Franklin, dreamed of inventing a concept of "social mathematics" that would enable government and society to be ruled by reason.³¹ In essence, Condorcet's proposal was to divide a vote on multiple options into a series of two-way, head-to-head battles. The "winner" is the alternative which obtains a simple majority over every other alternative in two-way competition, and is known generally as the "Condorcet winner."³² To say that Condorcet's mathematical writing was not initially well-received is a considerable understatement:

The obscurity and self-contradiction are without any parallel, so far as our experience of mathematical works extend . . . no amount of examples can convey an adequate impression of the evils. We believe that the work has been very little studied, for we have not observed any recognition of the repulsive peculiarities by which it is so undesirably distinguished.³³

Ultimately, however, Condorcet's approach became accepted as one of the more plausible attempts to deal with elections involving multiple choices.

"voting anomaly," see, e.g., Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 90.

31. See, e.g., EDWARD KASNER & JAMES NEWMAN, *MATHEMATICS AND THE IMAGINATION* 254 (1940).

32. See, e.g., H.P. Young, *Condorcet's Theory of Voting*, 82 AM. POL. SCI. REV. 1231 (1986).

33. KEITH MICHAEL BAKER, *CONDORCET: FROM NATURAL PHILOSOPHY TO SOCIAL MATHEMATICS* 227 (1975) (quoting ISAAC TODHUNTER, *HISTORY OF THE MATHEMATICAL THEORY OF PROBABILITY* 352 (1865)).

The following example demonstrates how Condorcet's approach works. Consider the case in which nine voters list their preference between three candidates (*A*, *B*, and *C*) in the following way:

		2 voters	3 voters	4 voters
	FIRST	<i>A</i>	<i>B</i>	<i>C</i>
PREFERENCE ORDER	SECOND	<i>B</i>	<i>A</i>	<i>B</i>
	THIRD	<i>C</i>	<i>C</i>	<i>A</i>

Since no candidate receives a majority of the first-place votes, the Condorcet plan calls for a series of head-to-head matches. Among all the voters, Candidate *B* is preferred over Candidate *A*, by seven votes (4+3) to two. Candidate *B* is also preferred over Candidate *C* by five votes (3+2) to four. Thus, Candidate *B*, having won all the head-to-head matches, would be declared the Condorcet winner.

Unfortunately, the Condorcet strategy of head-to-head competition is not without its problems. The most serious weakness is that it frequently will not produce a winner, as in this next example. Assume Alice, Bob, and Charles, are trying to select which flavor of ice cream to serve at their party. Their preferences are ranked in the following order:

		Alice	Bob	Charles
	FIRST	Vanilla	Chocolate	Strawberry
PREFERENCE ORDER	SECOND	Strawberry	Vanilla	Chocolate
	THIRD	Chocolate	Strawberry	Vanilla

Each of the three flavors receives one first place vote, so there is no simple majority winner. Unfortunately, the Condorcet approach also fails to produce a winner. In a head-to-head contest, Chocolate beats Vanilla two to one. In a similar match-up, Vanilla beats Strawberry two to one. Finally, because Strawberry defeats Chocolate two to one, no choice prevails in all the head-to-head matches. The following chart shows the lack of transitivity:

Contest	Winner
Chocolate vs. Vanilla	Chocolate
Vanilla vs. Strawberry	Vanilla
Strawberry vs. Chocolate	Strawberry

This is an example of "collective irrationality." If one announces a preference for Chocolate over Vanilla, and for Vanilla over Strawberry, it is irrational for that person to then say he or she also prefers Strawberry to Chocolate (If 3 is greater than 2, and 2 is greater than 1, we naturally expect 3 to be greater than 1 also). This failure of logic resulting from application of Condorcet's method is also known as "cycling" because every winner also loses.³⁴

This lack of transitivity creates a potential danger for democracy because the person who sets the voting agenda can control the outcome.³⁵ If the person setting the voting sequence favors Chocolate (in the ice cream example), she could stage the first head-to-head match between Vanilla and Strawberry, with Vanilla prevailing, and the second between Vanilla and Chocolate, whereby Chocolate wins (Agenda I). A leader with a preference for Strawberry, however, might start with Vanilla versus Chocolate, in which Chocolate wins, and follow with Strawberry versus Chocolate, with Strawberry prevailing (Agenda II). Thus, the election result may not turn on the will of the group so much as manipulation by those who control the agenda.

Agenda I

	<i>Contest</i>	<i>Winner</i>
<i>ROUND 1</i>	Vanilla vs. Strawberry	Vanilla
<i>ROUND 2</i>	Vanilla vs. Chocolate	Chocolate

Agenda II

	<i>Contest</i>	<i>Winner</i>
<i>ROUND 1</i>	Chocolate vs. Vanilla	Chocolate
<i>ROUND 2</i>	Strawberry vs. Chocolate	Strawberry

The presence of cycling in Condorcet's system was hailed an incurable defect by the prominent writer, Reverend Charles L. Dodgson, who also wrote under the name Lewis Carroll. Dodgson mocked supporters of Condorcet for their willingness to dispose of the problem of cycling as an extreme and improbable outcome:

34. See, e.g., Levmore, *supra* note 28, at 985.

35. See Block, *supra* note 28, at 987 ("[T]hose with control over the agenda or procedures are in a position to intentionally manipulate results."). In fact, even if those in charge desire to be neutral, their agenda-setting choice will still determine the election. See Michael E. Levine & Charles R. Plott, *Agenda Influence and its Implications*, 63 VA. L. REV. 561, 589 (1977) (stating that the agenda can control the outcome of the voting, even if "adopted with the most outcome-neutral intentions").

I am quite prepared to be told . . . "Oh, *that* is an extreme case: it could never really happen!" Now I have observed that this answer is always given instantly, with perfect confidence, and without any examination of the proposed case. It must therefore rest on some general principle: the mental process being probably something like this – "I have formed a theory. This case contradicts my theory. *Therefore* this is an extreme case, and would never occur in practice."³⁶

More recently, economist Kenneth Arrow demonstrated that far from being an unusual result, the possibility for group irrationality exists in every possible voting scheme designed to enable a group decision from among more than two candidates.³⁷ Arrow's "General Possibility Theorem," which is more commonly called his "Impossibility Theorem," states that no possible voting system can both prevent cycling and yet meet the following four goals:

(i) Unanimity: If everyone in the group prefers *A* to *B*, the group prefers *A* to *B*.

(ii) Nondictatorship: No one member has the power to determine the outcome regardless of the preferences of the other group members.

(iii) Range ("citizens' sovereignty"): When comparing alternatives, individual members are free to establish their preferences in any order.

(iv) Independence of Irrelevant Alternatives: If an individual or group has a preference between two options, the preference between those two is not affected by consideration of other options.

Arrow's Theorem has been summarized as follows: "No voting rule which allows voters to express their true preference and which treats each preference as equally decisive can assure us that it will produce a single preferred choice for three or more voters who have at least three alternatives."³⁸ The implications of this theorem are considerable. As economist Paul Samuelson wrote in 1952, "The search of the great minds of recorded history for the perfect democracy, it turns out, is the search for a chimera, for a logical self-contradiction."³⁹

Because Arrow's Theorem applies to any group's attempt to reach an aggregate decision, the theorem can also be applied to the Supreme Court.⁴⁰ Judge (then-Professor) Easterbrook wrote that Arrow's Theorem proved that the Court's decisions would tend to become inconsis-

36. C.L. DODGSON, A METHOD OF TAKING VOTES ON MORE THAN TWO ISSUES (1876), *reprinted in* DUNCAN BLACK, THE THEORY OF COMMITTEES AND ELECTIONS 224, 263 (2d ed. 1998). In fact, the likelihood of cycling increases with an increase in the number of different options from which to choose. See STEVEN J. BRAMS, PARADOXES IN POLITICS 41–43 (1976) (stating that as the number of candidates increase towards infinity, the probability of cycling occurring among three voters increases to one hundred percent).

37. ARROW, *supra* note 23, at 42–59.

38. JERRY L. MASHAW, GREED, CHAOS, AND GOVERNANCE 12–13 (1997).

39. PAUL HOFFMAN, ARCHIMEDES' REVENGE 221 (1988).

40. Easterbrook, *supra* note 28, at 802.

tent with one another: "At least some inconsistency, and probably a great deal of inconsistency, is inevitable."⁴¹ While Arrow's Theorem has much to say about group decisions, which includes those of the Supreme Court, one must be careful in drawing practical conclusions of "inevitability" from principles of axiomatic logic.

First, it is not necessary for members of the Court to decide on a sequential rank of preferences before reaching a decision. All a Justice need do is decide his or her favored option for all the issues. If there is no majority support for a particular set of conclusions, the Justices then decide whether they would rather join their colleagues in a majority-creating position or else maintain their first preference irrespective of the failure to reach a majority. The first scenario might occur when a Justice prefers settling an issue and creating (somewhat desirable) precedent to holding out for his or her most desired position.⁴² Significantly, such circumstances do not require that any Justice make a complete ranking of all voting permutations.

Moreover, should a Justice decide to rank his or her preferences in order, it would likely remain undisclosed. While Justices often discuss their position on various issues in the same case, research of relevant Supreme Court case law reveals no case in which all of the Justices have detailed a preference order for every permutation of issues involved.⁴³ Without each member's complete ranking, it is not possible to determine the aggregate preference order for the Court.

Even if a complete preference ranking of all the Justices were available, the nature of Supreme Court voting minimizes the significance of a lack of transitivity. To see why, consider a variation of the

41. *Id.* at 831.

42. Consider Justice Scalia's opinion in *Cruzan v. Director, Missouri Department of Health*, 497 U.S. 261 (1990). In *Cruzan*, the Court, by a five to four vote, ruled that the State of Missouri did not violate the Due Process Clause by requiring parents of a comatose daughter to prove "by clear and convincing evidence" that she would have wanted the termination of life support. The Court stated that the state's great interest in the "protection and preservation of human life" outweighed the "constitutionally protected liberty interest in refusing unwanted medical treatment." *Id.* at 278, 280. Justice Scalia joined the majority opinion, but wrote a concurring opinion indicating that he preferred a different rationale:

While I agree with the Court's analysis today, and therefore join in its opinion, I would have preferred that we announce, clearly and promptly, that the federal courts have no business in this field; that American law has always accorded the State the power to prevent, by force if necessary, suicide—including suicide by refusing to take appropriate measures necessary to preserve one's life

Id. at 293 (Scalia, J., concurring).

43. Specifically, in none of the cases discussed in this Article do the Justices describe their preference order for all permutations of the issues in a case. Since the cases collected in this Article are the most fractured of the multi-issue cases, and because there is no obvious reason for a Justice to go through such a process, it seems highly unlikely that such a listing has occurred in any case.

Pentagon Papers case, where President Nixon acted on his own authority to enjoin a newspaper from publishing information on the grounds of national security.⁴⁴ Assume that, as in the real case, there are two issues: (i) whether the President's unilateral action violates separation of powers doctrine; and (ii) whether enjoining the newspaper violates the First Amendment. If the newspaper prevails on either or both of these issues, the injunction will be lifted.

Assume that, unlike the real case, all of the Justices want the injunction lifted.⁴⁵ Thus, the choice of "no violation of either separation of powers or First Amendment" is everyone's least preferred option. Next, assume that a group composed of Justices Marshall, White, and Stewart is so anxious to show its disapproval of the President, that their strongest preference is to have the injunction lifted on both separation of powers and First Amendment grounds.⁴⁶ Their next preference is to lift the injunction on separation of powers grounds alone, and their third preference is to rely only on the First Amendment.

Further imagine that Justices Douglas, Black and Brennan are strong supporters of First Amendment rights, and their strongest preference is to have the injunction lifted on First Amendment grounds alone. Their next preference is to rely on both the First Amendment and separation of powers.⁴⁷ Thus, their third preference is to rely only on separation of powers.

Finally, imagine that Justices Harlan, Burger, and Blackmun are most concerned with separation of powers but believe that finding both a separation of powers and First Amendment violation would be unnecessarily insulting to the President. Thus, their first preference is to have the injunction lifted on separation of powers grounds alone,

44. See *N.Y. Times Co. v. United States*, 403 U.S. 713 (1971).

45. In the real case, Chief Justice Burger and Justices Harlan and Blackmun voted to uphold the injunction. See *id.* at 756 (Harlan, J., dissenting) (stating the President had "constitutional primacy in the field of foreign affairs"). Both Chief Justice Burger and Justice Blackmun signed Justice Harlan's dissent.

46. In the real case, Justices Marshall, White, and Stewart focused on the separation of powers. See *id.* at 741 (Marshall, J., concurring) ("The issue is whether this Court or the Congress has the power to make law."); *id.* at 732 (White, J., concurring) ("At least in the absence of legislation by Congress, based on its own investigations and findings, I am quite unable to agree that the inherent powers of the Executive and the courts reach so far as to authorize remedies having such sweeping potential for inhibiting publications by the press."). Justice Stewart joined Justice White's concurrence.

47. In the real case, Justices Brennan, Douglas, and Black focused exclusively on the First Amendment and did not discuss the separation of powers. See *id.* at 725 (Brennan, J., concurring) ("[T]he First Amendment stands as an absolute bar to the imposition of judicial restraints in circumstances of the kind presented by these cases."); *id.* at 714-15 (Black, J., concurring) ("I believe that every moment's continuance of the injunctions against these newspapers amounts to a flagrant, indefensible, and continuing violation of the First Amendment."). Justice Douglas joined Justice Black's concurrence.

their second preference is to have the injunction lifted on First Amendment grounds alone, and their third preference is to rely on both. The Justices' preference order would then appear as follows:

		<i>Marshall, White, Stewart [3 votes]</i>	<i>Douglas, Black, Brennan [3 votes]</i>	<i>Harlan, Burger, Blackmun [3 votes]</i>
	1	Violates Both	Only Violates 1st Amendment	Only Violates Sep of Powers
PREFERENCE ORDER	2	Only Violates Sep of Powers	Violates Both	Only Violates 1st Amendment
	3	Only Violates 1st Amendment	Only Violates Sep of Powers	Violates Both
	4	Not Violate Ei- ther	Not Violate Ei- ther	Not Violate Ei- ther

Just as occurred in the previous ice cream example, head-to-head voting results in an unbreakable cycle among the top three choices: "Violates Both" defeats "Only Violates Sep of Powers" by a six-to-three vote (with the Marshall and Douglas groups prevailing); "Only Violates Sep of Powers" defeats "Only Violates 1st Amendment" by a six to three vote (with the Marshall and Harlan groups prevailing); and "Only Violates 1st Amendment" defeats "Violates Both" by a six to three vote (with the Douglas and Harlan groups prevailing). Thus, there is no Condorcet winner and no transitivity.

In all likelihood, however, the Court's decision would not reveal the order of preferences so that not even the Justices would know that cycling occurred. In fact, the Court might issue a unanimous judgment supporting the newspaper with three separate opinions expressing a different set of issue resolutions. Alternatively, however, the Court could end with an opinion containing "shifting majorities," and holding that the President violated both the separation of powers and the First Amendment.⁴⁸ Justice Marshall might write an opinion which he and his two supporters embrace completely. The other groups would likely sign onto only the part they agree with, creating majority support for the issues they favor. Thus, each group obtains what it wants most: Douglas's group gets a First Amendment decision, Harlan's group gets a separation of powers decision, and Marshall's group gets both.⁴⁹ Thus, the lack of transitivity does not prevent the

48. See Rogers, *I Vote This Way*, *supra* note 29, at 456.

49. Note that the exact same result could follow even if the preference order did not result in cycling. Consider the same voting breakdown, only this time assume that the Harlan group was so concerned with separation of powers that its strongest preference was to have the injunction lifted on separation of powers grounds alone, with its next preference being relying on both.

Court from resolving the dispute before it. Moreover, the process of Supreme Court voting is capable of masking the existence of such cycling when it does occur.

One might also inquire whether the conditions necessary for Arrow's Theorem to operate are ever met in the case of Supreme Court decision-making. Professor Maxwell Stearns argues convincingly that Arrow's requirement of unlimited "range" is not present in Supreme Court voting.⁵⁰ Stearns claims two aspects of Supreme Court decision-making prevent the Justices from "ranking the underlying rationales offered in the various opinions in a given case in any conceivable order."⁵¹ First, every case is decided by outcome voting, the dichotomous choice of which party wins.⁵² Second, majority opinions are often able to be created only by deferring to the Justice who holds the narrowest grounds for supporting the winning side.⁵³ These two fac-

The Justices' revised preference order would then appear as follows:

		<i>Marshall, White, Stewart</i> [3 votes]	<i>Douglas, Black, Brennan</i> [3 votes]	<i>Harlan, Burger, Blackmun</i> [3 votes]
	1	Violates Both	Only Violates 1st Amendment	Only Violates Sep of Powers
<i>PREFERENCE ORDER</i>	2	Only Violates Sep of Powers	Violates Both	Violates Both
	3	Only Violates 1st Amendment	Only Violates Sep of Powers	Only Violates 1st Amendment
	4	Not Violate Ei- ther	Not Violate Ei- ther	Not Violate Ei- ther

This time there is no cycling. "Violates Both" prevails over the other three choices in head-to-head competitions, defeating "Only Violates Sep of Power" six to three (Marshall and Douglas prevailing); defeating "Only Violates 1st Amendment" six to three (Marshall and Harlan prevailing); and defeating "Not Violate Either" nine to zero. Thus, "Violates Both" is the Condorcet winner and there is no lack of transitivity.

The Court's decision again might be contained in three separate opinions, all supporting the newspaper and each expressing a different set of issue resolutions. The Court might, however, end up again with an opinion with "shifting majorities," holding that the President violated both the separation of powers and the First Amendment.

Thus, whether or not head-to-head voting results in cycling, the process of Supreme Court voting can lead to the identical finished product.

50. Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 109.

51. *Id.*

52. *See id.*

53. *See id.* One such example might be *Lee v. Weisman*, 505 U.S. 577 (1992), where four Justices went along with Justice Kennedy's opinion that prayer at a high school graduation was an unconstitutional "coercion" of religion by the government, even though the four apparently saw the case as more of an "endorsement" of religion which violated the First Amendment. *Id.* at 609 (Blackmun, J., con-

tors reduce the sovereignty of the Justices because they "significantly limit strategic interactions among the justices . . ." ⁵⁴ Thus, the condition of "range" may not apply to the Supreme Court.

Even if one concludes that all four of Arrow's conditions apply to the Supreme Court, the question remains as to what conclusions can be drawn about the Court's decision-making. According to Easterbrook, "as time goes on and the stock of precedents grows . . . [t]he availability of inconsistent precedents allows the Justices to 'prove' anything they like, without fear of contradiction." ⁵⁵ However, if precedent is viewed narrowly, Arrow's Theorem does not create a serious problem of inconsistent Supreme Court constitutional decisions because a Court faced with a narrowly-defined precedent it dislikes is free to vote to overturn it. ⁵⁶ Since each vote on overruling is dichotomous, there is no danger of cycling. Thus, while the Court will, at different times, be inconsistent in its decisions, it will not face a stable of inconsistent precedents.

The same does not hold, however, if precedent is considered more broadly. When precedent concerning a particular constitutional decision is not based solely on whether a particular clause is violated, but also includes the values or principles accompanying that decision, Arrow's Theorem may create a problem. ⁵⁷ There are numerous precedential values or principles contained in Court decisions. In weighing the importance of these values or principles, each of the nine Justices would likely establish a different preference order. According to Arrow's Theorem, an attempt to aggregate individual preferences into a complete order of preference could lead to cycling problems.

Consider three values (*A*, *B*, and *C*) ⁵⁸ preferred by nine Justices in the following order:

curing) ("[O]ur cases have prohibited government endorsement of religion, its sponsorship, and active involvement in religion, whether or not citizens were coerced to conform."). Justice Kennedy had previously refused to find mere "endorsement" as unconstitutional. See *County of Allegheny v. ACLU*, 492 U.S. 573, 655 (1989) (Kennedy, J., dissenting) ("This view of the Establishment Clause reflects an unjustified hostility toward religion, a hostility inconsistent with our history and our precedents . . ."). Accordingly, the four joined Justice Kennedy's "coercion" analysis in *Lee* to constitute a winning majority opinion.

54. Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 109.

55. Easterbrook, *supra* note 28, at 831.

56. See, e.g., *National League of Cities v. Usery*, 426 U.S. 833 (1976), *overruled by Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528, 531 (1985) (holding Congress can enforce minimum-wage laws against the states).

57. Easterbrook, *supra* note 28, at 830.

58. For example, the principles could be federalism, separation of powers, and stare decisis.

		<i>Justices 1,2,3</i>	<i>Justices 4,5,6</i>	<i>Justices 7,8,9</i>
	FIRST	Value A	Value B	Value C
PREFERENCE ORDER	SECOND	Value B	Value C	Value A
	THIRD	Value C	Value A	Value B

The value preferences are, once again, not transitive. In this example, Arrow's inconsistency might manifest itself in two ways. If all three values are implicated by the same case, the Court might be unable to reach a majority opinion. Each group of Justices will join one of three opinions arguing that a different value should determine the case. The judgment of the split Court will depend on which party is favored by at least two of the competing values. This does not pose a problem of collective irrationality; it is merely an example of collective disagreement. Indeed, if the values supporting the prevailing judgment are not mutually exclusive, it is likely that a majority opinion will be written incorporating the multiple values supporting it.⁵⁹

A more troubling type of inconsistency arises when only two values are considered at a time. For example, in the first case a majority of the Court might determine that Value A is more important than Value B. In a subsequent case, a majority of the Court might rationally conclude that Value B is more important than Value C. Finally, in a later case a majority of rational Justices, might conclude that Value C is more important than Value A. Thus, those trying to reconcile the Court's precedent would correctly perceive that a Court consisting of perfectly logical individuals has created an irrational, precedential preference order. Using Arrow's Theorem to explain actual Supreme Court decisions requires great caution, however. Almost all of the inconsistency found in Supreme Court decisions can be attributed to factors other than the inevitability of cycling.

First, Arrow's Theorem only speaks to cycling among the same group of voters. Arrow's work was motivated by, and limited to, an exploration of the "methods of aggregating individual tastes which imply rational behavior on the part of the community"⁶⁰ For the Supreme Court, the community consists of nine Justices hearing a particular case at a particular time. It does not take a mathematical proof to establish that different communities can reach decisions that

59. See, e.g., *Printz v. United States*, 521 U.S. 898 (1997). In holding unconstitutional a federal law which required state law enforcement officers to conduct background checks on prospective handgun purchasers, the majority opinion cited two values: federalism, *id.* at 920 ("The Constitution thus contemplates that a State's government will represent and remain accountable to its own citizens."), and separation of powers, *id.* at 922 ("The Constitution does not leave to speculation who is to administer the laws enacted by Congress; the President").

60. ARROW, *supra* note 23, at 3.

are inconsistent or that rely on inconsistent values and principles. That is, as membership on the Court changes over time, decisions on particular issues are also likely to change, creating inconsistency with prior decisions. This result can occur even though both Courts act rationally in their decision-making.

*United States v. Morrison*⁶¹ offers a prime example. In that case, the Supreme Court ruled in a five to four decision that a provision of the Violence Against Women Act providing a federal civil remedy to victims of gender-motivated violence exceeded Congress's power under the Commerce Clause.⁶² The Court held that Congress may not "regulate noneconomic, violent criminal conduct based solely on that conduct's aggregate effect on interstate commerce."⁶³ Chief Justice Rehnquist added: "In recognizing this fact we preserve one of the few principles that has been consistent since the Clause was adopted."⁶⁴ Alternatively, Justice Souter's dissenting opinion provided: "Our cases . . . stand for the following proposition[]. Congress has the power to legislate with regard to activity that, in the aggregate, has a substantial effect on interstate commerce."⁶⁵

Assuming Chief Justice Rehnquist is correct, earlier cases upholding federal laws that protect civil rights and outlaw loan sharking are not inconsistent with *Morrison*; they simply presented an issue different from a law banning violent, non-economic conduct.⁶⁶ If Justice Souter is correct, the inconsistency between *Morrison* and earlier cases is still not caused by a lack of transitivity. Rather, in the year 2000, a majority acted according to a different set of values (preserving a sphere of regulation for the states) than those of earlier Courts (deferring to Congress's view of the national economic welfare). Similarly, the inconsistency between the Court of the 1960s and the 1990s⁶⁷ can more readily be attributed to a change in values among the voting Justices, rather than to the inevitable cycling of values.

A second caution regarding the use of Arrow's Theorem to explain Supreme Court decision-making arises in the case of plurality opin-

61. 529 U.S. 598 (2000).

62. *Id.* at 617.

63. *Id.* The Court struck down 42 U.S.C. § 13981, a part of the Violence Against Women Act of 1994.

64. *Morrison*, 529 U.S. at 618.

65. *Id.* at 628 (Souter, J., dissenting).

66. See *Perez v. United States*, 402 U.S. 146 (1971) (upholding anti-loan sharking law); *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964) (upholding Civil Rights Act).

67. Compare *Sherbert v. Verner*, 374 U.S. 398, 403 (1963) (stating that "any incidental burden on the free exercise of . . . religion [must] be justified by a 'compelling state interest . . .'"), with *Employment Div. v. Smith*, 494 U.S. 872, 878 (1990) (stating that if a burden on the free exercise of religion is "merely the incidental effect of a generally applicable and otherwise valid provision, the First Amendment has not been offended").

ions. Because the Supreme Court does not vote by ranking individual preferences, plurality opinions are generally not caused by cycling. Take the case of *Barnes v. Glen Theatre, Inc.*,⁶⁸ holding that a law banning public nudity and applied to nude dancing, did not violate the First Amendment.⁶⁹ Chief Justice Rehnquist, writing for three Justices, found that the statute was justified by the state's interest in protecting societal order and morality.⁷⁰ Justice Scalia determined that because the statute was a law of general applicability, it could not violate the First Amendment.⁷¹ Justice Souter found that the law as applied did not violate the First Amendment because of the state's interest in combating the "secondary effects of adult establishments."⁷²

Attempting to ascertain the meaning of *Barnes*, the Sixth Circuit Court of Appeals erroneously blamed the confusion on Arrow's Theorem:

In any case in which the Court does not produce a majority opinion, and there are several different issues on which the members of the Court disagree, it may follow that no single line of reasoning can be described that is both internally consistent and is subscribed to by a majority with respect to each premise and conclusion.⁷³

In fact, the problem in *Barnes* is not explained by Arrow's Theorem. Since the Supreme Court does not engage in head-to-head voting between pairs of issues, there is no lack of transitivity in this case. As with most cases involving plurality decisions, it is simply the result of Justices faced with more than two options and dividing such that there is no majority. Thus, no internal inconsistency results by altering the order in which the Court voted.

A final and especially serious limitation on the applicability of Arrow's Theorem to Supreme Court decision-making is that, for cycling to cause the Court to create conflicting precedents, the conflicting values cannot all be raised initially in the same case. If forced to confront a conflicting preference order of principles at the same time, the lack of transitivity would create a split Court, unable to reach any majority opinion, and thus unable to create any precedent at all. Accordingly, the lack of transitivity will create a pool of inconsistent precedents only where different pairs of principles arise in separate cases raising unrelated issues. The lack of transitivity would then only cause a problem if those principles subsequently arise together in a case where somehow they are all relevant to deciding the same issue.

68. 501 U.S. 560 (1991).

69. *Id.* (plurality opinion).

70. *Id.* at 568.

71. *Id.* at 572 (Scalia, J., concurring in the judgment).

72. *Id.* at 582 (Souter, J., concurring in the judgment).

73. *DLS, Inc. v. City of Chattanooga*, 107 F.3d 403, 409 n.4 (6th Cir. 1997) (citing KENNETH ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* (2d ed. 1963)).

A rare example of a lack of transitivity can be seen in a trio of cases involving the following question: When multiple issues are presented to the Court, in what order should those issues be addressed? In a 1974 case, *National Railroad Passenger Corp. v. National Ass'n of Railroad Passengers*,⁷⁴ the Supreme Court was faced with a challenge to discontinued train service by a group of passengers. There were two primary issues: (i) whether the Amtrak Act created a private cause of action; and (ii) whether the plaintiffs had standing under the Act. The Court stated that the first issue to be addressed was whether there was a private cause of action because, "[s]ince we hold that no right of action exists, questions of standing and jurisdiction become immaterial."⁷⁵

In the 1984 case, *Block v. Community Nutrition Institute*,⁷⁶ consumers challenged a milk market order of the Secretary of Agriculture. The court of appeals found that the consumers had constitutional standing but lacked standing under the relevant statute. The Supreme Court addressed the statutory standing issue first, and, finding that Congress did not intend to grant standing to consumers, declared there was no reason to decide the constitutional standing issue.⁷⁷

Finally, in 1998 the Court decided *Steel Co. v. Citizens for a Better Environment*,⁷⁸ an environmental case presenting two issues: (i) whether the relevant law created a private cause of action for "purely past violations"; and (ii) whether the plaintiffs had constitutional standing. The Court ruled that constitutional standing must be decided first, because, "Article III jurisdiction is always an antecedent question"⁷⁹

We are thus left with a true lack of transitivity.⁸⁰ When the issues were "private cause of action" and "statutory standing," cause of action was decided first. When the issues were "statutory standing" and "constitutional standing," statutory standing was decided first. When the issues were "constitutional standing" and "cause of action," however, constitutional standing was decided first. The following chart shows these cases exhibit the same cycling that occurred in the ice cream scenario:

74. 414 U.S. 453 (1974).

75. *Id.* at 456 n.13.

76. 467 U.S. 340 (1984).

77. *Id.* at 353 n.4.

78. 523 U.S. 83 (1998).

79. *Id.* at 101.

80. Justice Stevens referred to this result as "a logical dilemma." *Id.* at 120 n.12 (Stevens, J., concurring). Justice Scalia, for the Court, referred to the lack of transitivity as a "broken circle[]." *Id.* at 97 n.2 (majority opinion).

<i>Choice of Issues</i>	<i>Which Is Decided First?</i>
Cause of Action vs. Statutory Standing	Cause of Action
Statutory Standing vs. Constitutional Standing	Statutory Standing
Cause of Action vs. Constitutional Standing	Constitutional Standing

The failure of logic in this result would become readily apparent were all three issues subsequently raised in a single case. Based on precedent, the Court has no way to decide which of the three issues to begin with, since, for any issue chosen, there is another which is antecedent.

That a true example of cycling has been identified does not mean that it is a common occurrence. In fact, this lack of transitivity arises only in the rare situation where three related issues appear in separate pairings in different cases. Further, for lack of transitivity to be a problem, the three issues must finally arise in the same case. That is, if only two of these issues recur, the Court will simply reach the same conclusion it did the first time that pairing occurred.⁸¹ Only if the Court is required to resolve the three issues in the same case will the Court have to contend with lack of transitivity. Since the above trio of cases were decided, however, no Supreme Court case has presented all three issues simultaneously. Arrow's Theorem stays in its quiver.

Significantly, however, the nature of Supreme Court decision-making creates an alternative type of irrationality, quite distinct from the cycling described by Condorcet and Arrow. The following section demonstrates that irrationality is possible in any case with at least two distinct issues, and that such irrationality has occurred many times.

III. THE IRRATIONALITY THEOREM

Suppose one was to say, "I will take an umbrella either if it is raining now or if the forecast calls for rain. It is both raining and the forecast says 'rain today.' Therefore, I won't take my umbrella." Such a decision would be considered irrational, because every condition for taking an umbrella was met yet the opposite conclusion was reached.⁸² Assuming there is no other reason for not taking an um-

81. See Kornhauser & Sager, *Unpacking the Court*, *supra* note 29, at 108 n.35 ("[A] perfectly stable voting pattern emerges from such a court. If the individual judges decide cases consistently, like cases will be decided alike, and no problem of consistency presents itself."); see also Rogers, *I Vote This Way*, *supra* note 29, at 468-69.

82. In terms of formal logic, the first sentence in the quote is a syllogism, consisting of two alternate premises and a conclusion. The next sentence declares the two

brella (e.g., someone else is bringing an umbrella to share), a rational person should not reach this conclusion.

Groups like the Supreme Court, however, can and sometimes do reach similar irrational conclusions. In several cases, one party has garnered the support of a majority of the Justices on every relevant issue, but still lost the case. This irrationality is not merely aesthetically unpleasing, it makes it impossible for lower courts to apply Supreme Court precedent faithfully. It also creates the real possibility that disputes raising similar issues will be resolved differently. A recent case, *Miller v. Albright*,⁸³ reveals both the structure of institutional irrationality and the confusion which inevitably follows.

A. *Miller* and Sex Discrimination

The primary claim in *Miller* was that a provision of the federal Immigration and Naturalization Act⁸⁴ amounted to unconstitutional sex discrimination. When only one parent of an illegitimate child is an American citizen, federal law creates different rules for obtaining citizenship for that child, depending on the sex of the citizen parent. Children born abroad and out of wedlock to citizen fathers, but not to citizen mothers, must obtain formal proof of a biological connection with the citizen parent by age eighteen. Lorelyn Penero Miller was born outside the United States to a Filipino mother and an American citizen father. She was denied an American passport and filed suit in federal court.

There were three main issues in the case. The first question concerned whether the federal courts had power to grant the relief sought, a judgment declaring Miller a citizen of the United States. Second, since she was not treated differently because of her own sex, the Court had to determine whether Miller had standing to raise the claim of gender discrimination on behalf of her father. The third question was whether the law unconstitutionally discriminated on the basis of sex. For Miller to win the case, she needed to prevail on all three issues.

A fractured Court issued four different opinions.⁸⁵ Writing only for himself and Chief Justice Rehnquist, Justice Stevens ruled for the

premises to be true. The last sentence rejects the conclusion. Assuming there are no unspoken premises, this would be an illogical conclusion.

83. 523 U.S. 420 (1998).

84. 8 U.S.C. § 1409 (2000).

85. There were actually five opinions, with all three dissenters, Justices Ginsburg, Souter, and Breyer, signing onto two decisions, one authored by Justice Ginsburg, the other by Justice Breyer. For purposes of the analysis of the Court's irrationality in *Miller*, it is easier to consider just Justice Breyer's opinion, as Justice Ginsburg's focused primarily on the history of discriminatory immigration laws and did not address the other two issues of the case. *Miller*, 523 U.S. at 460-71 (Ginsburg, J., dissenting).

government. He stated that the Court had the power to declare Miller a citizen, and that she had standing to raise the sex discrimination issue. Nonetheless, he wrote that the law did not violate equal protection because it was based on real differences between male and female parents in “ensuring reliable proof of a biological relationship,” and not on the “accidental byproduct of a traditional way of thinking about the members of either sex.”⁸⁶

Justice Scalia, writing for himself and Justice Thomas, did not address whether the law violated the equal protection clause, but did find that Miller had standing to raise the sex discrimination claim for her father.⁸⁷ Justice Scalia found for the government on the grounds that the Court had no power to issue the requested remedy, “conferral of citizenship on a basis other than that prescribed by Congress.”⁸⁸

Justice O'Connor, writing for herself and Justice Kennedy, also ruled for the government. She wrote that in light of the “presumption against third-party standing,” Miller did not have standing to raise the claim that her father received differential treatment due to his sex.⁸⁹ While not addressing the issue of whether the Court had the power to issue the requested remedy, O'Connor stated that the law could not pass the constitutional standard for sex discrimination: “Although I do not share Justice [Stevens'] assessment that the provision withstands heightened scrutiny, I believe it passes rational scrutiny for the reasons he gives for sustaining it under the higher standard.”⁹⁰

Justice Breyer wrote a dissenting opinion in which Justices Ginsburg and Souter joined.⁹¹ He wrote that Miller should win the case. First, because of her close relationship with her father, and because the government had successfully convinced the district court to dismiss her father from suit, Miller had standing to raise his sex discrimination claim.⁹² Second, the Court had power to grant the desired remedy, since the statute would automatically confer citizenship with the offending section removed. Finally, Breyer wrote that the law unconstitutionally discriminated based on sex.

Thus, the Court ruled that one party—the government—should win the case even though a majority of the Justices apparently be-

86. *Id.* at 444–45 (plurality opinion).

87. *Id.* at 455 n.1 (Scalia, J., concurring).

88. *Id.* at 453.

89. *Id.* at 445 (O'Connor, J., concurring).

90. *Id.* at 451–52.

91. Justice Ginsburg also wrote a dissent in which Justices Breyer and Souter joined. Because her opinion did not address all of the issues raised in the case, and because she joined in Justice Breyer's opinion, I will treat her opinions as reflected in Justice Breyer's dissenting opinion.

92. *Miller*, 523 U.S. at 473–74 (Breyer, J., dissenting). The lower court had ruled that the father lacked standing because he was not harmed by his daughter's lack of citizenship.

lieved that the winning party was wrong on every relevant constitutional issue. By putting the votes of the different Justices in chart form, one can see how this surprising result was reached.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does Miller have standing to raise her father's constitutional claim?</i>	<i>Does law's gender-based distinction violate equal protection?</i>	<i>Can Court award relief without violating separation of powers?</i>	<i>Does Miller win?</i>
Stevens (2)	Yes (2)	No (2)	Yes (2)	No (2)
O'Connor (2)	No (2)	Yes (2)	Not Say (2)	No (2)
Scalia (2)	Yes (2)	Not Say (2)	No (2)	No (2)
Breyer (3)	Yes (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 7-2	Yes 5-2	Yes 5-2	No 6-3

Had the same five Justices voted (i) that Miller had standing to raise the sex discrimination claim; (ii) that the law unconstitutionally discriminated based on sex; and (iii) that the Court had the power to issue the requested remedy, Miller obviously would have won the case. It would be irrational for any individual Justice to have voted for Miller on all three issues, yet vote that she should lose the case. Yet that is precisely what the Court in its collective decision-making concluded.

The consequences flowing from the irrationality of a decision like *Miller* are more than intellectually unappealing. They create insurmountable difficulties for those who try to understand the law, especially those who are duty-bound to follow the Court's interpretation of the supreme law of the land. Unsurprisingly, lower courts attempting to interpret *Miller* were unable to agree on how to deal with its confusing outcome.

Some courts described *Miller* as declaring that gender discrimination is almost always going to be unconstitutional. For example, in *Rainey v. Chever*,⁹³ the Georgia Supreme Court struck down an inheritance law which prevented biological fathers from inheriting from their illegitimate children if they failed to provide support for the child.⁹⁴ The Georgia court, finding the differential treatment of fathers and mothers violated equal protection, relied on the following characterization of *Miller*: "[The Supreme] Court agreed it would be

93. 510 S.E.2d 823 (Ga. 1999), *cert denied*, 527 U.S. 1044 (1999).

94. *Id.* The statute stated that "neither the father nor any child of the father nor any other paternal kin shall inherit from or through a child born out of wedlock if it shall be established by a preponderance of evidence that the father failed or refused openly to treat the child as his own or failed or refused to provide support for the child." GA. CODE ANN. § 53-2-4(b)(2) (1996).

unlikely that any gender classification based on stereotypes could survive heightened scrutiny."⁹⁵

Other courts extracted precisely the opposite holding from *Miller*. In the words of one judge, "the [*Miller*] Court held that it is not an equal protection violation to impose certain requirements on children claiming citizenship through their fathers while not imposing those same requirements on children claiming citizenship through their mothers."⁹⁶

Three years after *Miller*, the constitutionality of the same provision of the Immigration and Naturalization Act again reached the Supreme Court. Unlike in *Miller*, the Court in *Nguyen v. INS*⁹⁷ was able to reach a majority decision. Because the father brought suit in that case, there was no lack of standing to raise the gender discrimination claim. Justices O'Connor and Kennedy who found no standing in *Miller*, parted ways in *Nguyen*, with Kennedy writing the majority opinion holding that the naturalization law did not constitute unlawful sex discrimination. Joining him were Justice Stevens and Chief Justice Rehnquist who voiced the same view in *Miller*, as well as Justices Scalia and Thomas who concluded that federal courts lack the remedial power to confer citizenship in a manner other than that provided for in the statute.⁹⁸

95. *Rainey*, 510 S.E.2d at 824; accord *Lake v. Reno*, 226 F.3d 141 (2d Cir. 2000); see also *United States v. Ahumada-Aguilar*, 189 F.3d 1121, 1126 (9th Cir. 1999) ("[H]ad the facts in *Miller* been like those in this case, a majority of the Court would have found [the law] unconstitutional by applying heightened scrutiny.").

96. *United States v. Gomez-Orozco*, 28 F. Supp. 2d 1092, 1094 (C.D. Ill. 1998), *rev'd on other grounds*, 188 F.3d 422 (7th Cir. 1999); see also *Rainey*, 527 U.S. at 1047 (1999) (Thomas, J., dissenting from denial of certiorari) ("[W]hile the fractured decision in *Miller* may demonstrate the need for additional guidance as to the constitutionality of laws differentiating between fathers and mothers of out-of-wedlock children, it does not stand for the proposition that all generalizations based on gender are constitutionally infirm."); *Nguyen v. I.N.S.*, 208 F.3d 528, 533 (5th Cir. 2000) (upholding sex discrimination in immigration law, in part, because, "The [*Miller*] court found that the statute met several important governmental objectives . . ."), *aff'd*, 533 U.S. 53 (2001); *Breyer v. Meissner*, 23 F. Supp. 2d 521 (E.D. Pa. 1998) (granting deference to Congress in matters of immigration, even when they involve sex discrimination).

97. 533 U.S. 53 (2001).

98. Justice Scalia wrote a concurring opinion which Justice Thomas joined, stating that he still believed "the Court lacks power to provide relief of the sort requested in this suit . . ." *Id.* at 73 (Scalia, J., concurring). He reasoned, however, that because the majority in *Miller* concluded the Court did have such power, and a majority in *Nguyen* was proceeding on that assumption, it was "appropriate" to reach the merits of the equal protection claims. *Id.* at 73-74. It is noteworthy that Justice Scalia seems to be implying that the five votes on the issue garnered from the different opinions in *Miller* were worthy of comparable respect to the votes comprising the majority in the Court's opinion in *Nguyen*.

In *Nguyen*, when Justice Kennedy described the votes of the various Justices in *Miller*, he made an interesting omission and described the splintered *Miller* vote as follows:

Four justices, in two different opinions, rejected the challenge to the gender-based distinction, two finding the statute consistent with the Fifth Amendment (opinion of [Stevens], J., joined by [Rehnquist], C.J.), and two concluding that the court could not confer citizenship as a remedy even if the statute violated equal protection ([Scalia], J., joined by [Thomas], J., concurring in judgment). Three Justices reached a contrary result, and would have found the statute violative of equal protection. ([Ginsburg], J., joined by [Souter] and [Breyer], JJ., dissenting); ([Breyer], J., joined by [Souter] and [Ginsburg], JJ., dissenting). Finally, two Justices did not reach the issue as to the father, having determined that the child, the only petitioner in *Miller*, lacked standing to raise the equal protection rights of his father. ([O'Connor], J., joined by [Kennedy], J., concurring in judgment).⁹⁹

Curiously, Justice Kennedy did not mention the following statement made by Justice O'Connor and which he joined, indicating that the law could not survive an equal protection challenge: "Although I do not share Justice [Stevens'] assessment that the provision withstands heightened scrutiny . . . I believe it passes rational scrutiny for the reasons he gives for sustaining it under the higher standard."¹⁰⁰

Abandoning this earlier conclusion, Justice Kennedy proceeded to find that the naturalization law did indeed meet the mid-level scrutiny test for sex discrimination. He found the law was substantially related to the two important goals of: (i) "assuring that a biological parent-child relationship exists" between the citizen parent and child; and (ii) "ensur[ing] that the child and the citizen parent have some demonstrated opportunity or potential to develop . . . a relationship that . . . consists of the real, everyday ties that provide a connection between child and citizen parent and, in turn, the United States."¹⁰¹ According to Justice Kennedy, insisting on gender-neutral rules for accomplishing these purposes would be, "[t]o fail to acknowledge even our most basic biological differences The difference between men and women in relation to the birth process is a real one, and the principle of equal protection does not forbid Congress to address the problem at hand in a manner specific to each gender."¹⁰²

Speaking for four Justices, Justice O'Connor wrote an angry dissent in which she derided Justice Kennedy's opinion, noting it is no more than anachronistic "stereotype, to say that fathers who are present at birth lack an opportunity for a relationship on similar terms

99. *Id.* at 58 (majority opinion) (citations omitted).

100. *Miller*, 523 U.S. 420, 451-52 (O'Connor, J., concurring).

101. *Nguyen*, 533 U.S. at 62-65.

102. *Id.* at 73.

[with mothers]."¹⁰³ She concluded her attack by focusing on the majority's sloppy use of precedent:

No one should mistake the majority's analysis for a careful application of this Court's equal protection jurisprudence concerning sex-based classifications. Today's decision instead represents a deviation from a line of cases in which we have vigilantly applied heightened scrutiny to such classifications to determine whether a constitutional violation has occurred.¹⁰⁴

Miller thus demonstrates that even when each individual Justice is acting rationally, the nature of the Supreme Court's decision-making is such that the possibility of irrational outcomes can never be eliminated. *Miller* is one example of the Irrationality Theorem in action.

B. Proof of the Irrationality Theorem

This section offers a formal proof of the Irrationality Theorem. As with all proofs, it is necessary to begin by defining its terms.

An "outcome" is the ultimate determination as to which of two parties prevails. Of course there are more than two possible dispositions of a case by the Supreme Court. A lower court ruling can be affirmed, it can be reversed and remanded, or it can be dismissed. A dismissal, however, will favor one party or the other, usually the defendant in the original law suit. Thus, if the defendant prevails in the court of appeals, either a dismissal or an affirmance by the Supreme Court represents a victory for defendant. This can also be termed "winning the case."

An "issue" is a question before the Court whose resolution can directly determine the outcome of a case.¹⁰⁵

Two issues are "sequential" if the following conditions are met: (i) one of the issues (the "preliminary issue") must be resolved in order for the Court to reach the other issue (the "secondary issue"); (ii) if one party prevails on the preliminary issue the Court reaches the secondary issue, but if the other party prevails on the preliminary issue, it wins the case; and (iii) whenever the secondary issue is reached by the Court, whoever prevails on that issue wins the case.¹⁰⁶

103. *Id.* at 87 (O'Connor, J., dissenting). She suggested several gender-neutral means for accomplishing the governmental purposes, such as a requirement that the parent be present at birth or have knowledge of birth. *Id.* at 88.

104. *Id.* at 97.

105. See, e.g., Evan H. Caminker, *Sincere and Strategic Voting Norms on Multimember Courts*, 97 MICH. L. REV. 2297, 2304 (1999) (describing the "basic legal issues on whose resolution the proper case disposition depends").

106. The determination of when an issue is "preliminary" is more a matter of law than of logic. For example, in order to constrain the power of the Court, issues as to jurisdiction are generally decided before the Court reaches the substance of an issue. See, e.g., *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 94 (1998). Similarly, when faced with both a statutory and constitutional issue, the Court

For example, a plaintiff must prevail on jurisdiction, the preliminary issue, before reaching the merits of the claim, the secondary issue. If the defendant wins on jurisdiction, the defendant wins without the need to discuss the merits. If the plaintiff wins on jurisdiction, the court will decide the merits, and whoever prevails on the merits wins the case.¹⁰⁷

Two issues are "independent" if they are not sequential. For example, if a law prohibiting unmarried people from using birth control is challenged on both equal protection and due process grounds, a finding of either violation results in the law being struck down. That is, the resolution of one issue does not affect the Court's resolution of the other issue.

Where two independent issues are presented, there are four ways an individual Justice can vote. Either the plaintiff wins on both issues; the defendant wins both issues, the plaintiff wins the first but loses the second, or plaintiff wins the second but loses the first. A "unified vote" occurs in the first two situations where one party prevails on all of the issues. The latter two scenarios, where each party prevails on only one of the two issues can be termed "split votes."

Two issues (either sequential or independent) are "distinct" if for all possible combinations of votes, none would be irrational.¹⁰⁸

A particular issue or outcome is a "loser" if its negation receives the votes of a majority of the Court. "Negation" means the logical dichotomous inverse: one party either wins or loses; a particular clause either applies or does not apply. Thus, if a majority of Justices vote that the Court has power to declare someone a citizen, the proposition that the Court does not have such power is a "loser."¹⁰⁹

will resolve the statutory issue first, in order to be able to avoid a constitutional decision if possible. *See, e.g., Ashwander v. TVA*, 297 U.S. 288, 345-48 (1936) (Brandeis, J., concurring).

107. Just because the secondary issue does not need to be addressed if the primary issue is resolved a certain way, does not mean the secondary issue will not be discussed by the Justices. A Justice may rationally present a "conditional" analysis, finding no jurisdiction and then discussing the merits after declaring, "If there is jurisdiction" Thus, it is often possible to determine each Justice's view on the secondary issue, even if some believe the primary issue will conclude the case.
108. Because the conclusion that a law passes the compelling interest test cannot rationally coexist with the conclusion that the same law fails mid-level scrutiny, the issues of whether mid-level and compelling interest scrutiny are met are not "distinct" issues.
109. The definition of "loser" does not include situations where some Justices decline to address a particular issue. For example, consider a case where four Justices find no jurisdiction but say nothing about the merits, another four find jurisdiction and a violation of the Equal Protection Clause, and one finds jurisdiction and no violation of equal protection. In such a case, a majority (4+1) finds jurisdiction, so the proposition that there is no jurisdiction is a "loser." Since there is not

The "result" of the case is the resolution of the outcome and the relevant issues.

"Rational" means logically consistent.

"Irrational" means logically inconsistent.

An "irrational result" occurs if one party is a loser on every issue in a case and wins the case anyway. Obviously, if there is only one issue in a case, it is irrational for one side to prevail on that issue and lose on the ultimate outcome. Similarly, if there are multiple issues, it is irrational if one side prevails on all of the issues and loses on the ultimate outcome.¹¹⁰

The Irrationality Theorem can now be stated as follows: Even when each individual judge or justice is voting in a rational manner, for any court with at least three members deciding a case with at least two distinct issues, there is a possibility that the result will be irrational.

The proof of the Irrationality Theorem is straight-forward. Begin with the simplest situation of two parties and two distinct issues.¹¹¹ We will treat the situation, first, where the two issues are sequential, then where they are independent.

If the issues are sequential, the preliminary issue (e.g., jurisdiction), must be won by one party (the plaintiff) in order to get the Court to consider the secondary issue (e.g., the merits). The only way for the plaintiff to win the case is to win on both jurisdiction and the merits. If the plaintiff loses on jurisdiction, the defendant wins, even if the plaintiff would have won a majority on the merits. Obviously, if the plaintiff wins on jurisdiction and loses on the merits, the defendant also wins the case. Thus, under both split-vote scenarios, the plaintiff winning on jurisdiction and losing on the merits, and the plaintiff winning on the merits but losing on jurisdiction, the defendant wins the case. Stated generally, if there are two distinct sequential issues, the same party (here, the defendant) will win each split-vote permutation.

Similarly, if there are two distinct independent issues, the same party will win each split-vote permutation. This can be proven by utilizing the mathematical technique known as *reductio ad absurdum*: prove that a contradiction will inevitably arise if the opposite of your desired conclusion is assumed.¹¹² Thus, we begin by assuming that a

at least five votes for either side on the equal protection issue, neither view of that clause is a "loser" for this case.

110. This, of course, is what happened in *Miller*, and is the focus of this Article.

111. If there are more than two issues, the analysis would be identical if all of the voters unanimously place all but the same two options at the bottom of their list of preferences.

112. The technique of *reductio ad absurdum*, sometimes known as an indirect proof, has been utilized since 400 B.C.E. CARL BOYER, A HISTORY OF MATHEMATICS 66 (2d ed., revised by Uta Merzbach, 1991).

different party would win the case depending on which of the two split-vote scenarios occurred. We can chart this story by letting Defendant win the case if he wins on Issue *A* and loses on Issue *B*, and letting Plaintiff win the case if she wins on Issue *A* and loses on Issue *B*.¹¹³

ISSUE A			
		Plaintiff wins Issue A	Defendant wins Issue A
	Plaintiff wins Issue B	<i>P wins A</i> <i>P wins B</i> <i>P WINS CASE</i> I	<i>D wins A</i> <i>P wins B</i> <i>D WINS CASE</i> II
ISSUE B	Defendant wins Issue B	<i>P wins A</i> <i>D wins B</i> <i>P WINS CASE</i> III	<i>D wins A</i> <i>D wins B</i> <i>D WINS CASE</i> IV

The above chart reveals that, in all four voting possibilities, whoever wins Issue *A* wins the case. The resolution of Issue *B* never controls the outcome of the case. Because we have defined an issue as a question that "can determine directly the outcome of a case," Issue *B* cannot be considered an issue. Thus, we have a contradiction. Accordingly, the assumption that the two split-vote scenarios lead to a different party winning the case must be erroneous. Therefore, we can conclude that the same party will win the case for each split-vote permutation whenever there are two distinct independent issues.

Therefore, in any case with two distinct issues, either sequential or independent, we have the identical result: under either split-vote permutation, the same party wins the case.¹¹⁴

Next, let X be any even number, such that there are $X + 1$ Justices. This ensures an odd number of voters.¹¹⁵ Note that $\frac{1}{2}X$ is always less than a majority because $\frac{1}{2}X$ is less than $\frac{1}{2}(X + 1)$. In particular, on the Supreme Court, there are $8 + 1$ Justices, and $\frac{1}{2}$ of 8, or 4, is less than a majority. On the other hand, $(\frac{1}{2}X + 1)$ is always enough for a majority (on the Supreme Court, $4 + 1 = 5$, constituting a majority). Similarly, X is always sufficient for a majority (on the Court, 8 is a majority).

Assume there are two distinct issues and it is therefore rational for an individual Justice to either vote in favor of the same party on both

113. The proof is the same if we switch who wins which scenario.

114. Note that not every case has the plaintiff winning on a split decision. If a criminal defendant argues that his constitutional rights were violated because his confession was coerced and the police search was unreasonable, the defendant need only prevail on one of these defenses to avoid conviction. If there is a "split decision," therefore, the defendant wins the case.

115. Note that this proof assumes that the number of Justices is odd.

issues or split his or her vote. In one permissible breakdown of votes, $\frac{1}{2} X$ of the Justices vote for one split-vote permutation, and $\frac{1}{2} X$ of the Justices vote for the other split-vote permutation. Note that it has already been shown that the same party (for this example, assume it is "Defendant") will prevail under either split-vote alternative. Now, assume that the remaining Justice selects the unified vote in which the other party ("Plaintiff") wins. For the Supreme Court, this would be the same as if four Justices vote for one split-vote permutation, four Justices vote for the other split-vote permutation, and the remaining Justice votes for Plaintiff on both issues.

With the vote of that remaining Justice, a majority ($\frac{1}{2} X + 1$ or 5) has voted for the plaintiff on each of the two issues. However, since Defendant wins on either split-vote permutation, he wins the case because a majority of voters (X out of $X + 1$, or 8 out of 9) have voted with split votes. That is, the majority decision on both issues is in Plaintiff's favor, yet the majority has voted that Defendant wins the case. The Court has thus reached an irrational result. While this does not mean that the Court will reach an irrational result in every case involving two distinct issues, what is certain is that, in such a case, there is a real possibility that the Court will collectively reach an irrational result.¹¹⁶

116. Irrational results can be achieved through many voting permutations other than the one utilized in the proof. Consider the following matrix of voting possibilities. (For the sake of this example, Plaintiff will be the prevailing party in the event of a split vote.)

ISSUE A			
		Plaintiff wins Issue A	Defendant wins Issue A
	Plaintiff wins Issue B	<i>P wins A</i> <i>P wins B</i> <i>P WINS CASE</i> I	<i>D wins A</i> <i>P wins B</i> <i>P WINS CASE</i> II
ISSUE B	Defendant wins Issue B	<i>P wins A</i> <i>D wins B</i> <i>P WINS CASE</i> III	<i>D wins A</i> <i>D wins B</i> <i>D WINS CASE</i> IV

Assume there are two distinct issues and no majority opinion. If the votes for the split decisions (II + III) total a majority, Plaintiff wins the case. If the only other votes are for Defendant to win both issues (IV), there will be an irrational result. Plaintiff will win this case, but Defendant will win a majority for each issue. More generally, any time there is no majority opinion, but the sum of each voting combination (II + III), (II + IV), and (III + IV) equals a majority, there will be an irrational decision.

C. When Will Irrationality Arise?

Obviously, most cases do not produce an irrational result. Thus, the next step is to determine when an irrational result is likely to occur. Although many commentators have attempted to describe the necessary conditions for irrationality, failure to recognize the inherently mathematical nature of the problem has led many to mis-diagnose the problem.

For example, John Rogers claims that an irrational decision "potentially arises every time a majority is made up of (i) a plurality, and (ii) a concurrence that refuses to adopt a necessary portion of the plurality's analysis. This occurs whenever there is any substantive difference in the holdings of a plurality decision and a concurrence."¹¹⁷ As seen in the previous section, however, irrationality does not depend upon a plurality opinion. A sufficient number of split votes can achieve this result.

To confirm, consider a criminal defendant raising the issues of: (i) whether the confession was coerced; and (ii) whether the police search was improper.

<i>Was the confession coerced?</i>			
		Prosecution wins Confession Issue	Defendant wins Confession Issue
	Prosecution wins Search Issue	<i>P wins Confession Issue</i> <i>P wins Search Issue</i> P WINS CASE I	<i>D wins Confession Issue</i> <i>P wins Search Issue</i> D WINS CASE II
<i>Was the search improper?</i>	Defendant wins Search Issue	<i>P wins Confession Issue</i> <i>D wins Search Issue</i> D WINS CASE III	<i>D wins Confession Issue</i> <i>D wins Search Issue</i> D WINS CASE IV

Now suppose the nine Justices are evenly split three ways, with three votes each for options I, II, and III. There are therefore six votes for Prosecution (the government) to win the confession issue (I + III) and six votes for Prosecution to win on the search issue (I + II). Nonetheless, Defendant wins the case with 6 votes (II + III). Thus, irrationality arises even without a plurality opinion.

Secondly, Rogers' analysis understates both the number of different opinions and the requisite disagreement between them which is necessary for an irrational opinion. It is not enough that there be a substantive difference between a plurality and concurrence. Rather, there needs to be at least three options that disagree with each other

117. Rogers, *I Vote This Way*, *supra* note 29, at 443-444.

in the following manner: (i) there is at least one issue in each opinion which is resolved in favor of a different party than in the other two opinions; and (ii) at least two of the opinions which reach the same conclusion as to who should ultimately prevail must resolve at least two issues in favor of different parties.¹¹⁸

Maxwell Stearns is similarly incorrect in his conclusion that the same conditions that lead to the lack of transitivity (or cycling) described by Condorcet and Arrow lead to irrational results.¹¹⁹ In fact, cases with cycling need not end in an irrational result, and cases with irrational results need not contain cycling.

One can observe a situation where cycling does not create an irrational result by returning to the Pentagon Papers hypothetical.¹²⁰ The division between the Justices in that example created a cycle between three choices: the injunction "violates both separation of powers

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118. Returning to the simplest matrix and comparing the voting combinations discussed *supra* note 116, we see that those voting in cells II and III both conclude that Plaintiff wins but are diametrically opposed on two issues. Meanwhile, those voting in cells II and IV and those voting in cells III and IV disagree on who should ultimately prevail and are diametrically opposed on one issue.

ISSUE A			
		Plaintiff wins Issue A	Defendant wins Issue A
	Plaintiff wins Issue B	<i>P wins A</i> <i>P wins B</i> <i>P WINS CASE I</i>	<i>D wins A</i> <i>P wins B</i> <i>P WINS CASE II</i>
ISSUE B	Defendant wins Issue B	<i>P wins A</i> <i>D wins B</i> <i>P WINS CASE III</i>	<i>D wins A</i> <i>D wins B</i> <i>D WINS CASE IV</i>

The proof that an irrational opinion from a court requires there must be at least two opinions which reach the same conclusion as to who should ultimately prevail and reach diametrically opposed conclusions as to two or more issues is simple. First, to avoid having two such opinions, there can be no more than one split decision (since split decisions by definition differ from each other on at least two issues). If, for example, the only split decision in the above matrix was cell II, then assuming no majority opinion, the same party would not prevail on all issues. Plaintiff would win on Issue B (votes in cells I and IV), but Defendant would win on Issue A (votes in cells II and IV). In such a case, by definition, there would not be an irrational opinion.

119. See, e.g., Abramowicz & Stearns, *supra* note 22, at 1930 (referring to the voting anomaly, i.e., the irrational result, occurring when there is a "possible set of cyclical preferences" and "no Condorcet winner is available"); Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 156 (describing his analysis of cases with irrational results as focused on "the relevant grouping in which a collective intransitivity has the potential to occur"); see also Rogers, *I Vote This Way*, *supra* note 29, at 466 ("This anomaly is closely related to the possibility of 'cycling.'").
120. See *supra* text accompanying note 44.

and the First Amendment"; the injunction "violates only separation of powers but not the First Amendment"; and the injunction "violates only the First Amendment but not separation of powers."¹²¹ Nonetheless, because a majority of Justices voted that the newspaper should win on each issue, and all of the Justices voted that the newspaper should win the case, there was no irrational result. Thus, the conditions that lead to cycling do not necessarily lead to irrational results.

Similarly, the conditions that cause irrational results need not lead to cycling. Consider this simplified version of the vote in *Miller*. To make the chart easier to follow, the separation of powers issue is eliminated and Justices Scalia and Thomas are assumed to vote as they did in the subsequent case of *Nguyen*, that Miller had standing but that the law did not violate equal protection. Thus, they vote the same way Justice Stevens did. In such a case the voting breakdown appears as follows:

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does Miller have standing to raise her father's constitutional claim?</i>	<i>Does law's gender-based distinction violate equal protection?</i>	<i>Does Miller win?</i>
Stevens (2)	Yes (2)	No (2)	No (2)
Scalia (2)	Yes (2)	No (2)	No (2)
O'Connor (2)	No (2)	Yes (2)	No (2)
Breyer (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 7-2	Yes 5-2	No 6-3

As in the actual case, this is an irrational result because Miller prevailed on all relevant issues but lost the case.

It is not, however, inevitable that the opinions in this case represent the sort of cycling, or lack of transitivity, described by Arrow.

121. The Justices' preference order was:

		<i>Marshall, White, Stewart</i> [3 votes]	<i>Douglas, Black, Brennan</i> [3 votes]	<i>Harlan, Burger, Blackmun</i> [3 votes]
	1	Violates Both	Only Violates 1st Amendment	Only Violates Sep of Powers
PREFERENCE ORDER	2	Only Violates Sep of Powers	Violates Both	Only Violates 1st Amendment
	3	Only Violates 1st Amendment	Only Violates Sep of Powers	Violates Both
	4	Not Violate Either	Not Violate Either	Not Violate Either

To see why, it is necessary to examine the preference order for each group of Justices.

There are four possibilities from which the Justices can choose:

- I. Standing and Equal Protection Violation;
- II. No Standing and Equal Protection Violation;
- III. Standing and No Equal Protection Violation; or
- IV. No Standing and No Equal Protection Violation.

Because no Justice detailed a full preference order for all four options, some assumptions must be made. First, since each opinion revealed a preference for one combination, it is plausible to assume that the opposite combination would have been the least preferred of the author. Second, if we assume for ranking second and third-choice preferences that each of the Justices care more about their preferred views on equal protection than on standing, the presumed preference order chart can be completed as follows:

		<i>Stevens, Rehnquist, Scalia, Thomas</i> [4 votes]	<i>O'Connor, Kennedy</i> [2 votes]	<i>Breyer, Souter, Ginsburg</i> [3 votes]
	1	Standing, Not Violate Equal Pro	No Standing, Violates Equal Pro	Standing, Violates Equal Pro
PREFERENCE ORDER	2	No Standing, Not Violate Equal Pro	Standing, Violates Equal Pro	No Standing, Violates Equal Pro
	3	Standing, Violates Equal Pro	No Standing, Not Violate Equal Pro	Standing, Not Violate Equal Pro
	4	No Standing, Violates Equal Pro	Standing, Not Violate Equal Pro	No Standing, Not Violate Equal Pro

The chart reveals no cycling, or lack of transitivity, because one choice, "Standing and Violates Equal Pro," prevails over all three remaining options in head-to-head votes. Five Justices (led by Breyer and O'Connor) prefer "Standing and Violates Equal Pro" to either "Standing and Not Violate Equal Pro" or "No Standing and Not Violate Equal Pro." Seven Justices (led by Breyer and Stevens) prefer "Standing and Violates Equal Pro" to "No Standing and Violates Equal Pro." Thus, "Standing and Violates Equal Pro" is the Condorcet winner.¹²² There is no cycling, even though the voting pattern resulted in an irrational decision. Since we have already seen that cy-

122. The reason the winner of the case was not the Condorcet winner is because Justices do not decide cases using Condorcet's head-to-head technique. Although "Standing" and "Equal Pro Violation" were both selected by a majority, the out-

cling does not necessarily result in an irrational opinion, one can conclude that the same conditions do not lead to both cycling and irrational opinions.

To discern the necessary and sufficient conditions for an irrational decision to occur, one must first look at the breakdown of votes leading one party to lose on every issue but win the case anyway. If there is only one issue, no rational Justice can vote in favor of one party on the issue, but vote against that party on winning the case. Thus, there must be at least two distinct issues.¹²³ Next, there cannot be a majority opinion because the rational reasoning of the majority opinion would preclude an irrational result. That is, the Court must split

come of the case does not rationally follow from this Court's resolution of the relevant issues.

123. Sometimes, a case with multiple issues can be reduced to two issues by breaking up the way the issues are considered. For example, in *Miller*, there were three issues—standing, separation of powers, and equal protection. By dividing the votes into two categories (jurisdiction and merits) the case is reduced to two distinct issues:

I. Jurisdiction

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does the Court have jurisdiction?</i>	<i>Does law's gender-based distinction violate equal protection?</i>	<i>Does Miller win?</i>
Stevens (2)	Yes (2)	No (2)	No (2)
O'Connor (2)	No (2)	Yes (2)	Not (2)
Scalia (2)	No (2)	Not Say (2)	No (2)
Breyer (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 5-4	Yes 5-2	Yes 6-3

A majority of the Court, in a rational vote, decides they have jurisdiction to hear the case.

II. Merits

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does the Court have jurisdiction?</i>	<i>Does law's gender-based distinction violate equal protection?</i>	<i>Does Miller win?</i>
Stevens (2)	Yes (2)	No (2)	No (2)
O'Connor (2)	No (2)	Yes (2)	Not (2)
Scalia (2)	No (2)	Not Say (2)	No (2)
Breyer (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 5-4	Yes 5-2	Yes 6-3

This is the same irrational decision as the original framework, but reduced to two distinct issues.

among at least three opinions containing at least three different voting permutations.

To understand how these votes must be divided in order to generate an irrational opinion, the critical observation is that in a case where there are two issues, the same party can win the case by winning either of the split votes.¹²⁴ Since each party wins the case for one of the two unified votes, it is evident that one of the parties can win the case by prevailing on either of the split votes or one of the unified votes (three of the four possible voting permutations).

To determine what conditions are necessary to create irrational opinions, one can begin by charting the voting permutations of two distinct issues. Assume that the parties are "Defendant" and "Plaintiff" and that Defendant is the party who wins the case if there is a split vote.¹²⁵ The chart of the voting possibilities would then be as follows:

ISSUE A			
		Plaintiff wins Issue A	Defendant wins Issue A
	Plaintiff wins Issue B	<i>P wins A</i> <i>P wins B</i> <i>P WINS CASE</i> I	<i>D wins A</i> <i>P wins B</i> <i>P WINS CASE</i> II
ISSUE B	Defendant wins Issue B	<i>P wins A</i> <i>D wins B</i> <i>P WINS CASE</i> III	<i>D wins A</i> <i>D wins B</i> <i>D WINS CASE</i> IV

In our example, an irrational result is obtained only if Plaintiff wins the case, but Defendant receives a majority vote on each issue. An irrational result cannot be obtained in the reverse way, meaning that for our scenario, Plaintiff wins on each issue but Defendant wins the case. This is because the only voting permutation under which Defendant wins is by winning on both issues. Thus, the only way for Defendant to win is by having a majority of Justices vote that she wins on both issues (cell IV). If that were to happen, Defendant would both win on each issue and win the case, so there would not be an irrational result. Thus, were an irrational opinion to arise from this fact pattern, it must be Defendant who receives a majority vote on each issue while Plaintiff wins the case.

Defendant wins on issue A only if adding the number of votes in the right hand column (II + IV) equal a majority. Similarly, Defen-

124. See *supra* text accompanying note 116.

125. As previously discussed, it is not necessarily true that the plaintiff is the party who must win on both distinct issues to win the case. See *supra* text accompanying note 116.

dant wins on issue *B* only if adding the number of votes in the bottom row (III + IV) equal a majority. More generally, the party who must win on both issues in order to win the case will win on each issue only if the sums from adding the votes for his only winning permutation separately to each of the split decisions separately total a majority.

Plaintiff wins the case by either winning one of the split votes (II or III) or the unified vote for which he wins both of the issues (I). Thus, Plaintiff wins the case if the sum of the votes in all three of these permutations is a majority, that is, if the votes in I + II + III yield a majority of the votes cast. In more general terms, if the sum of those who select the split votes added to those who choose the unified vote which leads to the same result total a majority, the party who wins the case when there are split votes wins the case.¹²⁶

The requirements for an irrational opinion are, therefore, as follows:

- (i) There must be at least two distinct issues;
- (ii) There cannot be a majority opinion;
- (iii) There must be a minimum of three opinions such that:
 - a. There is at least one issue in each opinion which is resolved in favor of a different party than in the other two opinions; and

126. This mathematical approach permits a more precise description than social choice analysis which describes the conditions for irrationality as "multidimensionality and asymmetry." See, e.g., Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 156. Multidimensionality can be most easily understood by contrasting it with "unidimensionality." A question is unidimensional when the different options can be arrayed on a spectrum, where those who hold either extreme position would prefer a median position to the opposite extreme. *Id.* at 116-17. Thus, the question of whether to put no salt, a little salt, or a lot of salt in a soup is unidimensional since, in most cases, those who prefer either no salt or a lot of salt would prefer the moderate approach as their second choice. By contrast, if the question involves the possibility of placing more than one ingredient, such as salt and/or carrots in the soup, no such linear ranking is possible, and that question would be deemed multidimensional. *Id.* at 128. Thus, multidimensionality basically refers to the same concept as two distinct issues.

According to Professor Sterns, "Asymmetry arises when two camps resolve each of the two dispositive issues in opposite fashion, but nonetheless reach the same judgment." Maxwell L. Stearns, *The Condorcet Jury Theorem and Judicial Decisionmaking: A Reply to Saul Levmore*, 3 THEORETICAL INQ. L. 125, 144 (2002). This definition, though, is merely a tautology. Whenever Justices divide between split-vote possibilities, the two camps can resolve each issue in opposite fashion, but nonetheless reach the same judgment. In other words, every case which exhibits multidimensionality (i.e., two issues) will invariably exhibit asymmetry (i.e., the result of either split vote is that the same party wins the case) when different Justices select each split-vote option.

Professor Nash, utilizing a more mathematical approach, comes closer to obtaining a full description of when irrationality occurs. Nash, *supra* note 29, at 80-82. Nonetheless, his analysis, like Stearn's, does not reflect the fact that in every situation with two split-vote permutations, opposing majorities on each issue will lead to the same judgment. *Id.* at 81. Thus, his analysis omits the fact that only one party can be the victor in an irrational case.

b. At least two of the opinions which reach the same conclusion as to who should ultimately prevail must resolve at least two issues in favor of different parties; and

(iv) For cases with only two issues, the votes of the Justices are divided in such a way that:

a. The combined votes for the party who prevails in both split decisions total a majority (so that he wins the case); and

b. The sums from adding the unified votes for the other party separately to each of the split decisions total a majority (so that she wins on each issue).¹²⁷

127. From this set of requirements, it follows that when there are exactly two issues: (i) The only party who can win the case is the one who prevails when there is a split vote, *see supra* note 126 and accompanying text; and (ii) There must be at least one vote for each split-vote permutation. (This follows from the requirement that the sums obtained from adding the unified votes for the party who loses the case separately to each of the split decisions total a majority, since that party cannot otherwise prevail on each issue.)

When there are more than two distinct issues, the situation can get much more complicated. The number of split-vote scenarios increases rapidly (e.g., if there are three issues, there are six split-vote permutations, if there are four issues, there are fourteen). Moreover, it is no longer inevitable that the same party will prevail under every split-vote permutation.

The situation is further complicated because of the different structures cases with multiple issues can take. For some situations with multiple issues, one party must prevail on all issues to win the case. For example, a private school faced with losing a tax break because of its racially discriminatory admissions policies claimed that the I.R.S was violating its rights to the free exercise of religion, to free association, and to due process and equal protection of the laws. *Bob Jones Univ. v. Simon*, 416 U.S. 725, 735–736 (1974). In order to win the case, the government needed to prevail on every issue.

By contrast, in some cases of more than two issues, different parties can win split decisions. For example, in *Campbell v. Louisiana*, 523 U.S. 392 (1998), a white criminal defendant challenged his conviction on the grounds that racial discrimination against African-Americans occurred during the selection of grand jurors. For the defendant to prevail, he needed to win on the standing issue, and on either the equal protection or due process claims. Thus, both parties could win a split decision. The defendant could win the case by winning on only two of three issues (standing and either equal protection or due process) and the government could win by winning on only two of three issues (standing and due process).

Despite the complexities of cases with multiple issues, the basic principles of irrationality still hold. An irrational result for more than two distinct issues always requires that there be no majority opinion, that there be votes for at least two split-vote permutations, and that there be a minimum of three options such that: (i) any two opinions resolve at least one issue in favor of different parties; and (ii) at least one pair of opinions resolves two or more issues in favor of different parties.

D. The Irrationality Theorem in Action

In the past sixty years, the Supreme Court has issued numerous irrational decisions in addition to *Miller*.¹²⁸ In the interest of brevity, this Article shall discuss in detail one recent such case, *Eastern Enterprises v. Apfel*,¹²⁹ while summarizing the others in the Appendix.

Eastern Enterprises involved a challenge to the retroactive application of the Coal Act¹³⁰ which was enacted in 1992. The Act required Eastern Enterprises, a company that had sold its coal producing business in 1965, to contribute approximately \$50 million for health benefits of former employees.¹³¹ There were two main issues in the case: (i) whether the application of the Coal Act deprived Eastern Enterprises of its property in violation of the Takings Clause of the Fifth Amendment;¹³² and (ii) whether the Coal Act's retroactive application violated the Due Process Clause.

There were three main opinions in the case. Justice O'Connor wrote the plurality opinion for herself, Chief Justice Rehnquist, and Justices Scalia and Thomas, finding the Coal Act unconstitutional. Her opinion stated that the Coal Act violated the Takings Clause because it required Eastern Enterprises to bear the substantial expense of "lifetime health benefits for miners based on its activities decades before those benefits were promised."¹³³ While not definitively deciding the due process question, the opinion expressed strong "concerns about using the Due Process Clause to invalidate economic legislation."¹³⁴

128. *E. Enters. v. Apfel*, 524 U.S. 498 (1998); *Miller v. Albright*, 523 U.S. 420 (1998); *Am. Trucking Ass'n, Inc. v. Smith*, 496 U.S. 167 (1990); *Michael H. v. Gerald D.*, 491 U.S. 110 (1989); *Guardians Ass'n v. Civil Serv. Comm'n of N.Y.*, 463 U.S. 582 (1983); *Thomas v. Wash. Gas Light Co.*, 448 U.S. 261 (1980); *Apodaca v. Oregon*, 406 U.S. 404 (1972); *First Nat'l City Bank v. Banco Nacional de Cuba*, 406 U.S. 759 (1972); *Dutton v. Evans*, 400 U.S. 74 (1970); *NLRB v. Wyman-Gordon Co.*, 394 U.S. 759 (1969); *Curtis Publ'g Co. v. Butts*, 388 U.S. 130, 162 (1967); *James v. United States*, 366 U.S. 213 (1961); *Kovacs v. Cooper*, 336 U.S. 77 (1949); *Nat'l Mut. Ins. Co. v. Tidewater Transfer Co.*, 337 U.S. 582 (1949).

129. 524 U.S. 498 (1998).

130. Coal Industry Retiree Health Benefit Act (Coal Act) of 1992, 26 U.S.C. §§ 9701-9722 (1994 & Supp. II).

131. *E. Enters.*, 524 U.S. at 530-31 (plurality opinion).

132. The Takings Clause states: "Nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

133. *E. Enters.*, 524 U.S. at 537 (plurality opinion).

134. *Id.* Justice O'Connor for the plurality noted that because the Coal Act "violates the Takings Clause as applied to Eastern, we need not address Eastern's due process claim." *Id.* at 538. The antipathy the plurality felt towards finding a substantive due process violation can be seen in the two quotations given to support their "concerns." First, the plurality noted the Court's "abandonment of the use of the 'vague contours' of the Due Process Clause to nullify laws which a majority of the Court believe to be economically unwise." *Id.* at 537 (quoting *Ferguson v. Skrupa*, 372 U.S. 726, 731 (1963)). Next, the plurality repeated its declaration

Justice Kennedy wrote an opinion on behalf of himself alone. He stated that the Takings Clause was not violated by the Coal Act because it did not "affect an obligation relating to a specific property interest."¹³⁵ Nonetheless, he stated the Coal Act was unconstitutional as violative of "due process restrictions against severe retroactive legislation."¹³⁶

Finally, Justice Breyer wrote a dissent for himself and Justices Ginsburg, Stevens, and Souter. This opinion declared the Coal Act constitutional. Breyer agreed with Kennedy that the Takings Clause did not apply because the Coal Act did not affect "an interest in physical or intellectual property, but [imposed] an ordinary liability to pay money."¹³⁷ Breyer also found the Coal Act did not violate the Due Process Clause because it was not "fundamentally unfair" to impose liability, especially when Eastern Enterprises had, "until 1987, continued to draw sizable profits from the coal industry through a wholly owned subsidiary."¹³⁸

By charting the votes of the different Justices, one can see the extraordinary result: a majority of the Justices voted against Eastern Enterprises on both of the issues, yet the company won the case. The following chart summarizes the reasoning and conclusion of the opinions in *Eastern Enterprises*:

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does the Takings Clause apply to imposition of retroactive liability by the Coal Act?</i>	<i>Does the retroactive aspect of the Coal Act violate substantive due process?</i>	<i>Does Eastern Enterprises win?</i>
O'Connor (4)	Yes (4)	No (4)	Yes (4)
Kennedy (1)	No (1)	Yes (1)	Yes (1)
Breyer (4)	No (4)	No (4)	No (4)
TOTAL	No 5-4	No 8-1	Yes 5-4

that, "The day is gone when this Court uses the Due Process Clause . . . to strike down . . . laws, regulatory of business and industrial conditions, because they may be unwise, improvident, or out of harmony with a particular school of thought." *Id.* at 537-38 (quoting *Williamson v. Lee Optical of Okla., Inc.*, 348 U.S. 483, 488 (1955)). Moreover, if all four Justices signing on to the plurality opinion had been willing to rely on the Due Process Clause, they could have established, with Justice Kennedy's fifth vote, a majority for that proposition. The Court's willingness to create a splintered decision, thus, implies a lack of enthusiasm for the Due Process Clause.

135. *Id.* at 544 (Kennedy, J., concurring in the judgment and dissenting in part).

136. *Id.* at 549.

137. *Id.* at 554 (Breyer, J., dissenting).

138. *Id.* at 553-554.

Logic indicates that if the only basis on which the Coal Act is challenged is the claim that it violates the Takings Clause and the Due Process Clause, and the law violates neither, it must be constitutional. Nonetheless, the aggregation of the differing opinions leads to the irrational result that the Coal Act is unconstitutional, even though a majority of the Justices, albeit a different majority, finds it passes constitutional muster under each of the challenged provisions. The consequences flowing from *Eastern Enterprises*'s irrationality have been quite troubling. As one court of appeals noted with considerable understatement, "[t]he splintered nature of the Court makes it difficult to distill a guiding principle" ¹³⁹

Several courts have held that because there were five votes against finding a taking absent government action affecting a specific property interest, the case "makes clear that plaintiffs must first establish an independent property right before they can argue that the state has taken that right without just compensation."¹⁴⁰ Other courts have assumed, the opposite, that the plurality's view that an extreme retroactive law can violate the Takings Clause simply by requiring a large payment, "is entitled to some persuasive precedential effect" ¹⁴¹

Further, courts have split over whether *Eastern Enterprises* altered or reaffirmed the proper method for analyzing whether retroactive laws violate substantive due process. Some have concluded that there is a new, stricter test for retroactive laws: "To the extent that *Eastern* embodies principles capable of broader application, we believe that due process analysis encompasses the relevant concerns."¹⁴² Accordingly, the court ruled, "Instead of relying solely on the length of the retroactivity, we assess the relationship of the retroactively imposed liability to the governmental interests asserted in its defense."¹⁴³ Other courts, viewing *Eastern Enterprises* in a different

139. *Unity Real Estate Co. v. Hudson*, 178 F.3d 649, 658 (3d Cir. 1999).

140. *Parella v. Retirement Bd. of R.I. Employee's Ret. Sys.*, 173 F.3d 46, 58 (1st Cir. 1999); see also *Unity Real Estate Co.*, 178 F.3d at 659 ("[W]e are bound to follow the five-four vote against the takings claim in *Eastern*"); accord *Holland v. Big River Minerals Corp.*, 181 F.3d 597, 606 (4th Cir. 1999).

141. *United States v. Alcan Aluminum Corp.*, 49 F. Supp. 2d 96, 99 (N.D.N.Y. 1999); see also *Pittsburg County Rural Water Dist. No. 7 v. City of McAlester*, 358 F.3d 694, 718 (10th Cir. 2004) ("When a regulation adjusts the benefits and burdens of certain economic action to promote the common good, such regulation may in certain circumstances effect a taking."); *Anker Energy Corp. v. Consolidation Coal Co.*, 177 F.3d 161 (3d Cir. 1999) (analyzing retroactivity by noting that "[t]he plurality also found the lack of proportionality significant in its analysis of whether the Coal Act substantially interfered with *Eastern Enterprises*' reasonable investment backed expectations, and whether the nature of the governmental action was unusual").

142. *Unity Real Estate Co.*, 178 F.3d at 659.

143. *Id.* at 670.

manner, have found that the result reaffirms the Court's reluctance to utilize the Due Process Clause in such circumstances: "[W]e take seriously the *Eastern Enterprises* plurality's cautionary words about employing the Due Process Clause to invalidate economic legislation" ¹⁴⁴

Thus, the irrational decision of *Eastern Enterprises* has, not surprisingly, left multiple inconsistent interpretations in its wake. The next section explores several proposals for how the legal system should deal with irrational opinions.

IV. WHAT SHOULD BE DONE ABOUT IRRATIONAL DECISIONS?

The inevitability of irrational outcomes has led theorists to contrive various schemes for preventing these decisions from arising. Unfortunately, however, in each case, the proposed cure is arguably worse than the ailment.

A. *Bush v. Gore*: A Case of Disingenuous Voting?

One way to avoid an irrational result would be for one or more Justices to change their vote so that the votes on the individual issues are consistent with the result of the case.¹⁴⁵ Before considering whether Justices should change votes, the following discussion explores a particular instance where some Justices may have done just that.

It appears that a fear of creating an irrational opinion may have contributed to the unusual alignment of votes in *Bush v. Gore*,¹⁴⁶ which marked the end of the disputed 2000 presidential election. In that case, the Supreme Court was presented with three issues involving the Florida Supreme Court's order for a manual recount of disputed ballots: (i) whether the Florida Supreme Court established new standards for resolving Presidential election contests, thereby violating Article II, Section 1, Clause 2, of the United States Constitution; (ii) whether the use of standardless manual recounts violated the Equal Protection Clause; and (iii) whether, in the event there was an equal protection violation, the safe-harbor date provided in the federal election statute precluded the possibility of a constitutional recount.

144. *Ass'n of Bituminous Contractors, Inc. v. Apfel*, 156 F.3d 1246, 1258 (D.C. Cir. 1998); accord *Alcan Aluminum Corp.*, 49 F. Supp. 2d at 100.

145. See generally Rogers, *I Vote This Way*, *supra* note 29; Stearns, *Should Justices Ever Switch Votes*, *supra* note 29.

146. 531 U.S. 98 (2000). Professors Michael Abramowicz and Maxwell L. Stearns have similarly concluded that the decision of Chief Justice Rehnquist, and Justices Scalia and Thomas to join the per curiam decision reflected their desire to avoid having to "decide a landmark case involving a presidential election . . . based upon a set of rationales that simple counting could disclose not to support the judgment." Abramowicz & Stearns, *supra* note 22, at 1939.

In order to stop the recount, the Court needed to rule "yes" on either question (i) or on both questions (ii) and (iii).

In a *per curiam* opinion, joined by Chief Justice Rehnquist, and Justices Scalia, Thomas, O'Connor, and Kennedy, the Court ruled that the recount ordered by the Florida Supreme Court violated the Equal Protection Clause, because it failed to "satisfy the minimum requirement for non-arbitrary treatment of voters."¹⁴⁷ According to the Court, the Florida recount would have been conducted by various local election boards determining the validity of the ballots absent "specific rules designed to ensure uniform treatment."¹⁴⁸ Because different boards would likely use different standards, a ballot that was counted as valid in one county might well be considered invalid elsewhere. The Court held that by permitting this differential treatment, the Florida Supreme Court violated "its obligation to avoid arbitrary and disparate treatment of the members of its electorate."¹⁴⁹ Because it concluded that there was insufficient time for a revised recount before the safe-harbor date expired, the Court concluded that no recount could be held.

The *per curiam* opinion did not address the merits of the Article II claim, that is, that the Florida Supreme Court had impermissibly established new standards for resolving presidential election contests. Chief Justice Rehnquist, however, wrote a concurring opinion, joined by Justices Scalia and Thomas, stressing that while they "join the *per curiam* opinion," the Article II claim provides "additional grounds that require us to reverse the Florida Supreme Court's decision."¹⁵⁰

The four dissenting Justices, Justices Stevens, Ginsburg, Breyer, and Souter, all found no violation of Article II. Justices Stevens and Ginsburg also found no violation of equal protection. Justices Breyer and Souter found that the differential counting of ballots violated the Equal Protection Clause, but both concluded that there was sufficient time for an appropriate recount.

Of all of the mysteries surrounding the *Bush* decision, one of the more provocative is why the three concurring Justices signed onto the *per curiam* equal protection analysis, when Chief Justice Rehnquist, and Justices Scalia and Thomas had previously favored a far more restrictive reading of the Equal Protection Clause.¹⁵¹ For example, in

147. *Bush*, 531 U.S. at 105.

148. *Id.* at 106.

149. *Id.* at 105.

150. *Id.* at 111 (Rehnquist, C.J., concurring).

151. See, e.g., Abramowicz & Stearns, *supra* note 22, at 1928 ("[T]he equal protection analysis appears to be in tension with the general jurisprudence of these three conservative jurists, and that includes the issue of voting rights."); Bradley W. Joondeph, *Bush v. Gore, Federalism, and the Distrust of Politics*, 62 OHIO ST. L.J. 1781, 1827 (2001) ("The *per curiam* opinion in *Bush v. Gore* embraced a novel and rather expansive understanding of equal protection that seems largely out of

M.L.B. v. S.L.J.,¹⁵² Justice Thomas wrote in a dissent which was joined by Rehnquist and Scalia, that "the Equal Protection Clause shields only against purposeful discrimination."¹⁵³ It is therefore surprising to find these same three Justices joining the per curiam opinion in *Bush* which applies a heightened form of scrutiny, even though no one was subject to purposeful discrimination or harm.¹⁵⁴

In addition, the standard announced in the per curiam opinion was not one traditionally used by the Court.¹⁵⁵ That government must "avoid arbitrary and disparate treatment of the members of its electorate," had never previously been utilized in a voting rights case.¹⁵⁶ The three concurring Justices have often displayed downright hostility for what they term "newly minted" standards.¹⁵⁷ Nonetheless,

character for the Rehnquist Court."); Sanford Levinson, *The Return of Legal Realism*, 272 THE NATION Jan. 8/15, 2001, at 8, 8 ("How can one take seriously the majority's claims that their award of the presidency to Bush is based on their deep concern for safeguarding the fundamental values of equality? This majority has been infamous in recent years for relentlessly defending states' rights against the invocation of national legal or constitutional norms.").

152. 519 U.S. 102 (1996) (holding the Equal Protection Clause was violated when a state conditioned the taking of an appeal from the termination of parental rights on that parent's ability to pay record transcription costs).

153. *Id.* at 135 (Thomas, J., dissenting).

154. See, e.g., Richard A. Epstein, *In Such Manner as the Legislature Thereof May Direct*, 68 U. CHI. L. REV. 613, 616 (2001) ("In a word, the Florida scheme is devoid of any suspect classification needed to trigger the equal protection analysis.").

155. See *City of Cleburne v. Cleburne Living Ctr. Inc.*, 473 U.S. 432, 440-41 (1985). The Court in *City of Cleburne* described the three traditional standards employed in equal protection cases:

The general rule is that legislation is presumed to be valid and will be sustained if the classification drawn by the statute is rationally related to a legitimate state interest The general rule gives way, however, when a statute classifies by race, alienage, or national origin [T]hese laws are subjected to strict scrutiny and will be sustained only if they are suitably tailored to serve a compelling state interest Legislative classifications based on gender also call for a heightened standard of review A gender classification fails unless it is substantially related to a sufficiently important governmental interest.

Id.

156. See Abramowicz & Stearns, *supra* note 22, at 1939 n.109 (noting that an online search in the Westlaw Supreme Court cases database showed that the phrase "arbitrary and disparate treatment" as a test for a violation of equal protection had never appeared in a Supreme Court case); Michael J. Klarman, *Bush v. Gore Through the Lens of Constitutional History*, 89 CAL. L. REV. 1721, 1727 (2001) ("The majority's equal protection rationale creates entirely new law."); Jamin B. Raskin, *What's Wrong with Bush v. Gore and Why We Need to Amend the Constitution to Ensure It Never Happens Again*, 61 MD. L. REV. 652, 678 (2002) ("[N]o doctrinal foundation existed for what the conservative Justices did in *Bush v. Gore*.").

157. See, e.g., *Planned Parenthood of Southeastern Pa. v. Casey*, 505 U.S. 833, 944 (1992) (Rehnquist, C.J., concurring in part and dissenting in part) ("The joint opinion, following its newly minted variation on *stare decisis*, retains the outer

there was no criticism that the per curiam opinion had created and applied such a newly minted standard.

The mystery, then, is why the three Justices signed onto the per curiam opinion when it contained constitutional analysis which they would normally vigorously oppose. It is especially curious given that the same result would have been reached had they not signed onto the reasoning of the per curiam opinion. As stated earlier, to reverse the decision of the Florida Supreme Court and end the recounting process, it would have been sufficient to rely on either the Equal Protection Clause or Article II. Thus, if the three who signed the concurring opinion had voted to reverse the Florida court solely on Article II, the result would have been the same: five votes to end the recount immediately.

The answer may be that Chief Justice Rehnquist, and Justices Scalia and Thomas feared taking a path that might foster a perception that the President of the United States had been "selected" by an irrational decision. Indeed, an irrational decision would have arisen had the other two Justices who signed the per curiam opinion, Justices Kennedy and O'Connor, explicitly rejected their Article II argument.¹⁵⁸ Such a rejection is far from fanciful; reporters covering the case disclosed that these two Justices refused to sign an opinion drafted by Chief Justice Rehnquist which focused on the Article II claim.¹⁵⁹

Thus, had Justices Kennedy and O'Connor supported the equal protection claim and rejected the Article II claim, while Chief Justice Rehnquist, and Justices Scalia and Thomas supported the Article II claim but rejected the equal protection argument, the result would have been the classic irrational decision: a majority voting in favor of respondent Gore on every relevant issue, yet the Court ruling in favor of petitioner Bush. The following chart displays this alternative result:¹⁶⁰

shell of *Roe v. Wade* . . . but beats a wholesale retreat from the substance of that case. "). This opinion was joined by Justices Scalia, Thomas, and White.

158. It has been reported that Justice Kennedy authored the per curiam opinion. *See, e.g.,* DAVID A. KAPLAN, *THE ACCIDENTAL PRESIDENT* 284-85 (2001); Jeffery Rosen, *In Lieu of Manners*, N.Y. TIMES MAG., Feb. 4, 2001, at 46, 50.

159. *See* Linda Greenhouse, *Election Case a Test and a Trauma for Justices*, N.Y. TIMES, Feb. 20, 2001, at A1. Ms. Greenhouse reports that Chief Justice Rehnquist's draft had been intended as the majority opinion, but "failed to get the support of Justices Kennedy and O'Connor." *Id.* Instead "[t]hey drafted their own opinion, concluding that the standardless recount violated the guarantee of equal protection." *Id.*

160. The chart of the actual decision of *Bush* looks like this:

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Did the Florida Supreme Court establish new election standards in violation of Art. II?</i>	<i>Did the use of "standardless" recounts violate equal protection?</i>	<i>Should recount be stopped?</i>
O'Connor + Kennedy (2)	No (2)	Yes (2)	Yes (2)
Rehnquist (3)	Yes (3)	No (3)	Yes (3)
Breyer (2)	No (2)	Yes (2)	No (2)
Stevens (2)	No (2)	No (2)	No (2)
TOTAL	No 6-3	No 5-4	Yes 5-4

Considering the public's reaction when the opinion was issued, one can only imagine the ridicule the Court might have sustained had it issued a demonstrably irrational opinion.¹⁶¹ Thus, it is plausible to conclude that perhaps Chief Justice Rehnquist, and Justices Scalia and Thomas chose what they saw as the lesser of two evils: signing onto an equal protection analysis with which they did not fully agree,

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Did the Florida Supreme Court establish new election standards in violation of Art. II?</i>	<i>Did the use of "standardless" recounts violate equal protection?</i>	<i>Assuming an equal protection violation, did safe harbor date preclude a recount?</i>	<i>Should recount be stopped?</i>
Per Curiam (5)	Not Say (5)	Yes (5)	Yes (5)	Yes (5)
Rehnquist (3)	Yes (3)	Not Say (3)	Not Say (3)	Yes (3)
Breyer (2)	No (2)	Yes (2)	No (2)	No (2)
Stevens (2)	No (2)	No (2)	No (2)	No (2)
TOTAL	No 4-3	Yes 7-2	Yes 5-4	Yes 5-4

This is obviously not an "irrational" decision, because a majority supported a resolution of the equal protection argument in such a way that it squares with the Court's outcome.

161. See Abramowicz & Stearns, *supra* note 22, at 1939 n.328. Abramowicz and Stearns state:

[A]bsent the apparent vote switch by the Rehnquist camp, a complaint that six Justices rejected the proposition that there was an equal protection problem demanding reversal and that six Justices rejected the proposition that the Florida Supreme Court had effected an unconstitutional change in Florida election law would have been both easy to understand and powerful. Whether or not the Justices consciously recognized the potential existence of an issue voting anomaly, they presumably would have intuitively understood the likelihood of criticism of a disposition that lacks majority support for either of the two logically plausible, and agreed upon, rationales supporting a reversal.

Id.

rather than issue an irrational decision to resolve one of the most politically sensitive cases to arise in the last fifty years.

As a regular practice, such a method of avoiding irrational results presents some problems. First, it is of primary importance that Justices be honest about their reasoning. As one federal district judge has declared: "The requirement that the judiciary be candid is perhaps absolute."¹⁶² The most obvious reason for this requirement is the Court's "moral obligation of candor."¹⁶³ One need not research the law to understand that Justices should not deceive the public.

There are also practical reasons why Justices should not pretend to hold different opinions than they do in reality. First, candor is necessary to promote "the public accountability of judges and to stimulate judicial reflection and self-control."¹⁶⁴ One of the main benefits of published opinions is that they prevent Justices from basing decisions on "unprincipled" grounds.¹⁶⁵ In the words of Professor Deborah Hellman: "Candor thus acts as a prophylactic; the requirement of publicity insures that the reasons on which decisions are based are at least minimally acceptable to the public [Publicity] will prevent the judge from endorsing views that others perceive as wildly illegitimate."¹⁶⁶

Second, a Court's deception is bound to be suspected, sooner or later,¹⁶⁷ and the belief that Justices have not been honest in their published opinions "destroys their credibility."¹⁶⁸

Finally, disingenuous voting creates misleading precedent. Taking the *Bush* example, imagine the dilemma facing a lower court the next time there is an equal protection challenge to a recount decision. Lower courts must follow the majority's per curiam opinion, and apply its novel standard: to be constitutional, a state must ensure that local election boards "avoid arbitrary and disparate treatment of the members of its electorate."¹⁶⁹ Upon review, however, that standard faces possible rejection by the very Court that announced it. If indeed Chief Justice Rehnquist, and Justices Scalia and Thomas did not truly agree

162. *Phototron Corp. v. Eastman Kodak Co.*, 687 F. Supp. 1061, 1062 (N.D. Tex. 1988).

163. David L. Shapiro, *Courts, Legislatures, and Paternalism*, 74 VA. L. REV. 519, 556 (1988).

164. Paul Gewirtz, *Remedies and Resistance*, 92 YALE L.J. 585, 667 (1983).

165. See RICHARD A. POSNER, *THE FEDERAL COURTS* 205 (1985).

166. Deborah Hellman, *The Importance of Appearing Principled*, 37 ARIZ. L. REV. 1107, 1143 (1995).

167. See David L. Shapiro, *In Defense of Judicial Candor*, 100 HARV. L. REV. 731, 737 (1987) ("[L]ack of candor seldom goes undetected for long, and its detection only serves to increase the level of cynicism about the nature of judging and of judges.").

168. GUIDO CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* 175 (1982); see also Hellman, *supra* note 166, at 1127 ("[A] judge ought to avoid acting in a way that is likely to compromise the perceived integrity of the judiciary.").

169. *Bush v. Gore*, 531 U.S. 98, 105 (2000).

with the per curiam's equal protection analysis, they might well vote with Justices Stevens and Ginsburg in the future, thereby returning to the traditional equal protection standard of rational review. The public would then be left facing unequal application of the Equal Protection Clause.

B. The Limits of Disclosed Vote Switching

Some of these problems might be mitigated were a Justice to openly declare that, despite his or her determination of the relevant issues, he or she is voting for the other party to prevail. Such candor has occurred where a Justice switches his or her vote to produce a majority judgment where none of the possible judgments—affirmance, reversal, or remand—will otherwise receive a majority.¹⁷⁰ However, Justices can also switch votes to prevent the Court's opinion from being irrational.

Consider the case of *Pennsylvania v. Union Gas Co.*¹⁷¹ That case presented two issues: (i) whether Congress intended the Superfund law to permit private suits against the states for damages; and (ii) whether Congress has the power under the Commerce Clause to permit such suits. Union Gas needed to win on both of these issues to win the case. A majority of Justices found that Congress did intend the law to permit such private suits, while a different majority found that Congress had the requisite power. However, there were five Justices

170. See Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 110. Professor Stearns describes several cases where a Justice switched votes to produce a majority judgment. See, e.g., *Bragdon v. Abbott*, 524 U.S. 624, 656 (1998) (Stevens, J., concurring) (casting vote to remand rather than affirm and producing majority judgment); *Pennsylvania v. Muniz*, 496 U.S. 582, 608 (1990) (Rehnquist, C.J., concurring in part, concurring in the judgment in part, and dissenting in part) (casting vote to vacate and remand to produce a majority judgment); *Connecticut v. Johnson*, 460 U.S. 73, 89–90 (1983) (Stevens, J., concurring) (casting vote to affirm to produce majority judgment); *Md. Cas. Co. v. Cushing*, 347 U.S. 409, 423 (1954) (plurality opinion) (voting to remand to produce majority); *Klapprott v. United States*, 335 U.S. 601, 619 (1949) (Rutledge, J., concurring) (voting to remand to produce majority); *Von Moltke v. Gillies*, 332 U.S. 708, 726–27 (1948) (plurality opinion) (observing that two concurring Justices have agreed to break deadlock by voting with plurality to remand, rather than voting to reverse); *Screws v. United States*, 325 U.S. 91, 134 (1945) (Rutledge, J., concurring) (switching vote to remand).

There are strong institutional reasons for a Justice to switch his or her vote to enable resolution of the case with a majority vote on the judgment. See Edward A. Hartnett, *Ties in the Supreme Court of the United States*, 44 WM. & MARY L. REV. 643, 672 (2002) (stating that because of a “judgment impasse . . . a vote switch is therefore appropriate”). Justice Rutledge explained, “Stalemate should not prevail for any reason, however compelling, in a criminal cause or, if avoidable, in any other.” *Screws*, 325 U.S. at 134 (1945) (Rutledge, J., concurring).

171. 491 U.S. 1 (1989), *overruled by Seminole Tribe v. Florida*, 517 U.S. 44 (1996). See *infra* note 176.

who individually believed either that Congress did not intend the law to permit such private suits, or that Congress lacked the power to do so. Had all the Justices voted consistently with their individual reasoning, an irrational result would have occurred. Union Gas would have prevailed on every issue, but Pennsylvania would have won the case.¹⁷² To avoid this result, Justice White compromised, stating that despite his belief that Congress did not intend the law to permit such private suits, he would defer to the majority who believed Congress did so intend.¹⁷³ Accordingly, a majority voted in favor of Union Gas and White's switch averted an irrational result, since Union Gas prevailed on every issue and also won the case.¹⁷⁴

There have been only three cases, including *Union Gas*, where a Justice has admitted to switching votes to prevent the Court from is-

172. The following chart shows the voting outcome in the event the Justices had each voted according to their individual assessment of the issues:

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Did Congress authorize suits for damages against states in the superfund law?</i>	<i>Does Congress have the constitutional authority to authorize such suits?</i>	<i>Can Union Gas sue Pennsylvania?</i>
Brennan (4)	Yes (4)	Yes (4)	Yes (4)
Rehnquist (3)	No (3)	No (3)	No (3)
Scalia (1)	Yes (1)	No (1)	No (1)
White (1)	No (1)	Yes (1)	No (1)
TOTAL	Yes 5-4	Yes 5-4	No 5-4

Technically, Chief Justice Rehnquist did not "author" an opinion in this case. Rather, he, along with Justices O'Connor and Kennedy, signed onto part of Justice Scalia's opinion and part of Justice White's indicating that three of them believed that Congress did not intend the law to permit such private suits and that Congress lacked the power to do so.

173. Justice White wrote:

My view on the statutory issue has not prevailed, however; a majority of the Court has ruled that the statute, as amended, plainly intended to abrogate the immunity of the States from suit in the federal courts. I accept that judgment. This brings me to the question whether Congress has the constitutional power to abrogate the States' immunity. In that respect, I agree with the conclusion reached by Justice Brennan in Part III of his opinion, that Congress has the authority under Article I to abrogate the Eleventh Amendment immunity of the States

Union Gas Co., 491 U.S. at 56-57 (White, J., concurring in the judgment in part and dissenting in part).

174. The actual vote was as follows:

suing an irrational opinion.¹⁷⁵ Doubtless, such conduct ensures a "rational" result in a particular case and helps produce clear holdings on the underlying issues of the case.¹⁷⁶ Nonetheless, vote-switching presents its own set of problems. First, a Justice who switches votes to prevent an irrational result, by that very act, is guilty of irrational reasoning.¹⁷⁷ In *Union Gas*, Justice White in effect declared both that Congress did not intend the Superfund law to permit private suits against the states for damages and that Pennsylvania could be sued under the Superfund law.

A second problem is that the vote-switching Justice controls the outcome of the case unilaterally. This is not the same as a "swing"

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Did Congress authorize suits for damages against states in the superfund law?</i>	<i>Does Congress have the constitutional authority to authorize such suits?</i>	<i>Can Union Gas sue Pennsylvania?</i>
Brennan (4)	Yes (4)	Yes (4)	Yes (4)
Rehnquist (3)	No (3)	No (3)	No (3)
Stevens (1)	Yes (1)	No (1)	No (1)
White (1)	No (1)	Yes (1)	Yes (1)
TOTAL	Yes 5-4	Yes 5-4	Yes 5-4

175. The other two cases were *Arizona v. Fulminante*, 499 U.S. 279 (1991), and *United States v. Vuitch*, 402 U.S. 62 (1971). In *Fulminante*, there were three issues: whether the confession was coerced; whether harmless error analysis applies to the admission of a coerced confession; and whether the admission of the confession in this case was harmless. Although Justice Kennedy believed the confession was not coerced (and thus the conviction should be valid), because a majority found otherwise, he voted to reverse the conviction on the ground that its admission was not harmless. *Fulminante*, 499 U.S. at 313-14. In *Vuitch*, the Court faced two issues: whether the Supreme Court had jurisdiction to hear the government's appeal; and whether the statute in question was unconstitutionally vague. Even though Justices Harlan and Blackmun believed the Supreme Court did not have jurisdiction (and thus the government should lose the case), because a majority found otherwise, they voted that the government should win the case on the ground that the statute was not unconstitutionally vague. *Vuitch*, 402 U.S. at 93 (Harlan, J., dissenting as to jurisdiction.). See generally Kornhauser & Sager, *The One and the Many*, *supra* note 29; Stearns, *Should Justices Ever Switch Votes*, *supra* note 29.
176. There is some question, however, as to how firm the holdings of vote-switch cases really are. When overruling the constitutional holding of *Union Gas* seven years after it was announced, the Court declared: "Reconsidering the decision in *Union Gas*, we conclude that none of the policies underlying *stare decisis* require our continuing adherence to its holding. The decision has, since its issuance, been of questionable precedential value, largely because a majority of the Court expressly disagreed with the rationale of the plurality." *Seminole Tribe*, 517 U.S. at 66.
177. Professor Rogers refers to this as "individual inconsistency." Rogers, *I Vote This Way*, *supra* note 29, at 474.

Justice who affects the outcome of a case when his or her determination of a particular issue coincides with one group of Justices or another.¹⁷⁸ Rather, vote switching permits one Justice to control the outcome by the individual selection of one voting procedure or another. As Professors Kornhauser and Sager note, such procedural decisions “ought to be a matter of articulate and reflective practice, not the private impulse of each Justice.”¹⁷⁹

Finally, there is no governing principle for when it is appropriate for a Justice to switch votes. It has been suggested that in the few vote-switching cases, individual Justices were motivated by the precedential importance of the issue which became the Court’s holding due to their vote.¹⁸⁰ Such a practice could lead to retaliatory vote switching to defeat the scheme.¹⁸¹ For example, in *Union Gas*, Justice Scalia voted that Congress did intend the law to permit such private suits, but that Congress lacked the requisite Constitutional power. If Justice Scalia had been more concerned about the constitutional issue, and if he felt that Justice White was inappropriately “gaming the system,” he could have altered his vote to find Congress did not intend the law to permit private suits. This second vote-switch would create a majority for the proposition that there was no statutory authority for the suit, and thus the Court would not reach the constitutional issue. Such a system that permits, let alone encourages, such unprincipled manipulation should not be welcomed in a democratic society.¹⁸²

C. The Futility of Changing Voting Protocols

Some scholars have argued that group irrationality should be curtailed by requiring Justices to decide cases by voting directly on each issue in each case, rather than voting merely on the outcome.¹⁸³

178. For example, the Court by a five to four vote ruled that Congress could not authorize private law suits for damages against the state under title I of the Americans with Disabilities Act of 1990 (“ADA”), see *Bd. of Trs. of the Univ. of Ala. v. Garrett*, 531 U.S. 356 (2001), but by another five to four vote the Court ruled Congress could authorize private law suits for damages against the state under title II of the ADA, see *Tennessee v. Lane*, 541 U.S. 509 (2004). The only vote that changed between the decisions was the “swing vote” of Justice O’Connor.

179. Kornhauser & Sager, *The One and the Many*, *supra* note 29, at 24.

180. Stearns, *Should Justices Ever Switch Votes*, *supra* note 29, at 149.

181. Professor Rogers states that such vote switching will “undermine respect for the courts.” Rogers, *I Vote This Way*, *supra* note 29, at 475.

182. Such “voting against one’s own conclusions,” in order to achieve a desired outcome, is sometimes termed “strategic voting.” *Id.* at 468; see also Abramowicz & Stearns, *supra* note 22, at 1932 (stating that “principled” means “nonstrategic”).

183. Issue voting is different from what Professor Delson has termed “voting by part.” B. Rudolph Delson, *Typography in the U.S. Reports and Supreme Court Voting Protocols*, 76 N.Y.U. L. Rev. 1203, 1218 (2001). Voting by part occurs when a “Justice joins one part of another Justice’s opinion without joining that opinion in its entirety.” *Id.* By contrast issue voting is the protocol under which the Court

David Post and Steven Salop have described this system in terms of a preference for "issue voting," as opposed to "outcome voting."¹⁸⁴ One advantage of issue voting is that cases involving collective irrationality will still produce usable precedent. For example, if the Court in *Miller* had voted by issue, there would have been a clear seven to two majority in favor of finding standing, at least a five to two majority finding that the Court has the power to grant the relief requested, and a likely majority of at least five to two in favor of striking down the distinction as unconstitutional sex-based discrimination. These three holdings would then be treated as usable precedents, for lower courts as well as future Supreme Court decisions.

One problem with issue voting, however, is that the definition of what is an "issue" is not always self-evident. Frequently there is more than one way to define the relevant issues and sub-issues needing resolution.¹⁸⁵ For example, the question of whether a statute should be interpreted in a way that favors a particular party might be subdivided into narrower questions such as: (i) whether the plain language of the statute indicates who should prevail; or (ii) whether the statute's legislative history demands a particular interpretation.¹⁸⁶ Reasonable people may disagree.

A second problem with issue voting is that it does not prevent the thwarting of a majority's will. In fact, issue voting can lead to a situation where not only is the will of the majority thwarted, but the will of every Justice is frustrated. To illustrate, consider a hypothetical American citizen, captured in Afghanistan, and held as an enemy combatant without a hearing.¹⁸⁷ Assume that in order for the government to prevail, Congress must have authorized the detention. Next, assume the government has declared it will have to release the detainee if ordered to hold a hearing, because a hearing will require the disclosure of material harmful to national security. Thus, in order for the government to continue to hold the detainee, the Court must find that when Congress authorizes a detention, no due process hearing is required. Assume also that in order to continue holding the detainee,

votes on each issue necessary to resolve a case, and then reaches its conclusion based on those votes. *Id.*

184. Post & Salop, *Rowing Against the Tidewater*, *supra* note 29, at 744. They prefer the hyphenated phrases of "issue-voting" and "outcome-voting," but for simplicity, this Article drops the hyphen. Note that some commentators prefer the phrase "issue by issue voting." See, e.g., Delson, *supra* note 183, at 1204.

185. See, e.g., Kornhauser & Sager, *The One and the Many*, *supra* note 29, at 49 ("To resolve a controversy issue by issue, the judges must agree on what constitutes an issue."); Rogers, *Issue Voting*, *supra* note 29, at 1002.

186. Nash, *supra* note 29, at 128.

187. This example is derived from *Hamdi v. Rumsfeld*, 542 U.S. 507 (2004). Although the voting patterns of the actual case differ somewhat from those in the hypothetical, the Court in that case was badly divided on several of the issues raised in the case.

the government must show that the detention does not violate the Geneva Convention.

Now, assume that the Court is divided into three camps. A group headed by Justice O'Connor and joined by Chief Justice Rehnquist, and Justices Kennedy and Breyer, vote for the following: (i) Congress authorized the detention; (ii) when Congress authorizes a detention, a due process hearing is required; and (iii) detention does not violate the Geneva Convention. Thus, four Justices vote that the detainee must be released because a hearing before a neutral forum must be held for the detention to be valid.

Next, assume that a group headed by Justice Scalia and joined by Justices Stevens and Thomas, vote as follows: (i) Congress did not authorize the detention; (ii) when Congress does authorize a detention, a due process hearing is not required; and (iii) detention does not violate the Geneva Convention. Thus, because they concluded that Congress did not authorize the detention, these three Justices vote that the detainee must be released.

Finally, assume that Justice Souter, joined by Justice Ginsburg, votes that: (i) Congress did authorize the detention; (ii) when Congress does authorize a detention, a due process hearing is not required; and (iii) detention does violate the Geneva Convention. Thus, because they concluded that the detention does violate the Geneva Convention, these two Justices vote that the detainee must be released.

Under the current system of outcome voting, all of the Justices find that the detention is unlawful and the detainee must be released. If the Court utilized issue voting, however, the case would turn out very differently. A majority of Justices would have found for the government on each issue:

<i>ISSUE</i>	<i>VOTE COUNT</i>
(i) Congress authorizes the detention	O'Connor (4) + Souter (2) = 6 votes
(ii) A due process hearing is not required	Scalia (3) + Souter (2) = 5 votes
(iii) The detention does not violate the Geneva Convention	O'Connor (4) + Scalia (3) = 7 votes

Under an issue voting system, the government would win the case because it prevailed on each issue. This would lead to the remarkable situation where the detainee who brought the case would remain in detention, despite the fact that every single Justice believed he should

be released. If not irrational, such a result would certainly be deemed unjust.¹⁸⁸

The reason both traditional outcome voting and issue voting can create such illogical results appears to be that, under either regimen, a disconnect arises between the group's collective reasoning (as reflected by majority vote on individual issues) and the group's collective result (as reflected by majority vote on the result). The voting protocol itself does not cause the problem; it is inherent in the nature of collective decision-making. Faced with this incurable possibility, one wonders what techniques, if any, can best ameliorate the problem.

Some commentators have suggested adopting more complex voting protocols. For example, Professors Kornhauser and Sage propose the use of a "metavote," whereby Justices faced with an irrational decision vote on whether to use issue voting or outcome voting in that particular case.¹⁸⁹ The primary advantage to such a system is that the Justices decide together which is more important to preserve in that case—the judgment or the resolution of the issues.¹⁹⁰ However, the same divisions within the Court causing irrationality will frequently render the metavote meaningless. Returning to the case of *Eastern Enterprises*, it would be surprising to find Justices who were troubled enough by the retroactive application of the Coal Act to find it unconstitutional, opting for issue voting which would not only permit the Act to stand but would generate holdings that the Act does not offend either the Takings Clause or the Due Process Clause. As Professor Jonathan Nash points out, because there are multiple factors to consider during a metavote, the metavote may yet lead to an irrational result.¹⁹¹ Thus, the metavote is subject to the same dangers as the current system.

Nash proposes an even more complicated hybrid system that attempts to draw a bright line between what he terms a "pure question

188. This hypothetical is derived from a similar one offered by Professor Rogers. See Rogers, *I Vote This Way*, *supra* note 29, at 472–73. He imagined a capital case where four Justices voted that an execution was barred by the Fifth Amendment but not the Eighth Amendment, while four other Justices voted that the execution would violate the Eighth Amendment but not the Fifth Amendment. Under issue voting, if the sole remaining Justice voted that neither provision barred the execution, there would be a five to four majority for finding neither amendment was violated. Thus, if issue voting were utilized, the defendant would be executed, despite the fact that eight of the nine Justices believed the execution was unconstitutional. In the words of Professor Rogers, "This result cannot be right." *Id.* at 473.

189. Kornhauser & Sage, *The One and the Many*, *supra* note 29, at 30.

190. See *id.* at 57. They suggest different factors that appellate courts could use in making their metavotes, including, *inter alia*, the comparative importance of the issues versus the outcome, the avoidance of path dependence, and whether the case involves the appeal of serious criminal convictions. See *id.* at 33–41.

191. Nash, *supra* note 29, at 142.

of law" and an "application of law to fact."¹⁹² At the risk of oversimplifying his proposal, Nash suggests that outcome voting be used to establish the appropriate legal standard governing a particular cause of action. He then proposes that application of law to fact under that standard be determined separately using issue voting.¹⁹³ If there is a disagreement in the Court over which voting protocol to use, a "true metavote may be required to resolve the controversy."¹⁹⁴

Nash's proposal presents several difficulties. First, the line between a "pure question of law" and an "application of law to fact" is not always bright. Recall in *Miller* that one of the issues was whether the Equal Protection Clause was violated by a federal law imposing different rules for obtaining citizenship for illegitimate children who had only one American citizen parent, depending on the sex of the citizen parent. Justice Stevens stated that such distinctions are constitutional because they meet the standard that "normally governs gender discrimination," which he describes as "substantially related to important governmental objectives."¹⁹⁵ He cited *United States v. Virginia*¹⁹⁶ for support of this standard.¹⁹⁷ By contrast, Justice Breyer, citing the same case, stated that the law violated equal protection because it lacked, "the 'exceedingly persuasive' support that the Constitution requires."¹⁹⁸ It is thus not clear whether the issue of whether the law violates equal protection is a "pure question of law"—determining the appropriate standard for judging gender discrimination cases—or an "application of law to fact"—applying an agreed upon standard to the facts of the case.¹⁹⁹

It is also not clear whether there would be agreement as to what issues are being voted on. For example, Nash states that the Supreme Court's opinion in *Apodaca v. Oregon*,²⁰⁰ "ultimately raised only a single issue of pure law—whether the Constitution requires a unanimous

192. *Id.* at 149–50.

193. *Id.* at 148. Nash also states that issue voting should be utilized for "arguments that would constitute independent appeals were interlocutory appeals permissible. Each of these arguments should be afforded separate votes." *Id.* at 147.

194. *Id.* at 150.

195. *Miller v. Albright*, 523 U.S. 420, 434 n.11 (1998) (Stevens, J., concurring).

196. 518 U.S. 515 (1996).

197. *Miller*, 523 U.S. at 434 n.11 (Stevens, J., concurring).

198. *Id.* at 472 (Breyer, J. dissenting) (quoting *Virginia*, 518 U.S. at 530).

199. In fact, this question arose in *United States v. Virginia*. Justice Ginsburg, writing for the majority, stated that she was merely summarizing "the Court's current directions for cases of official classification based on gender." *Id.* at 532. By contrast, Chief Justice Rehnquist complained that by stating that the government must demonstrate an "exceedingly persuasive justification" to support a gender-based classification . . . the Court thereby introduces an element of uncertainty respecting the appropriate test." *Id.* at 559 (Rehnquist, C.J., concurring).

200. 406 U.S. 404 (1972).

jury verdict for a criminal conviction to stand in state court.”²⁰¹ Conversely, every Justice voting in the case saw two issues needing resolution: (i) whether the same standard applies to state and federal criminal trials; and (ii) whether a unanimous jury was required in federal criminal trials.²⁰² Finally, because Nash’s voting protocol is unable to prevent the occurrence of irrational outcomes, it seems unlikely that any court would choose to adopt such a complicated system.

Thus, while there are benefits associated with each proposed change in voting protocol, none provide a solution to the problem of irrational decisions. Thus the problem is destined to remain.

D. Irrational Solutions

1. *Tinkering Around the Edges*

Even though it is impossible to eliminate irrational opinions, there are certain steps that can be taken at the margins to make things better. One step would be for Justices who see that an irrational opinion is looming to avoid discussing issues that are unnecessary for reaching their decision as to who should prevail. In *Miller*, for example, once Justices O’Connor and Kennedy had decided that the plaintiff lacked standing, they had, in effect, decided that she should lose the case. There was no need for them to discuss the merits of the sex discrimination claim. Similarly, there was no need for Justices Scalia and Thomas to discuss standing once they decided that the Court could not issue the requested remedy. Thus, had all these Justices stopped when they had resolved the issue which decided the case for them, there would have been no change in the result of the case. The plaintiff still would have lost. Had they not voiced their views, however, there would not have been a majority deciding in favor of the losing party on the issues. There would not have been an irrational Court decision. Put differently, when dealing with potentially irrational opinions, “[t]he better part of valour is discretion.”²⁰³

Another possibility for dealing with irrational opinions focuses on those issued by lower-level appellate courts. John Nash suggests the Supreme Court should be especially willing to accept petitions for cer-

201. Nash, *supra* note 29, at 153.

202. Nash’s plan, in fact, would prohibit Justices from breaking the issue into sub-issues: “The proposal directs that pure issues of law not be decomposed.” *Id.* at 153. For an analysis of the Court’s actual voting pattern in *Apodaca*, see *infra* Part VI.

203. WILLIAM SHAKESPEARE, *THE FIRST PART OF THE HISTORY OF HENRY THE FOURTH* act 5, sc. 4. It may be that some Justices believe it is important for lower courts to be able to see the number of Justices with a particular viewpoint on a disputed substantive question, such as the correct standard for dealing with sex discrimination. If so, they may conclude that the value of presenting that viewpoint, even in an irrational opinion, outweighs the confusion created by such opinions.

tiorari for cases involving irrational opinions by lower appellate courts to eliminate confusion.²⁰⁴ This makes eminent sense, but, of course, cannot address the Supreme Court's own irrational opinions.

2. *Living with Irrationality*

Ultimately, as long as society utilizes multi-member courts, it will be impossible to eliminate the possibility of irrational appellate opinions. Rather than rail at the dilemma wrought by the imperfections of our system, however, we should recognize that these imperfections are simply part of the inherent limitations of humanity. Law is not the only intellectual discipline to confront such limitations.

Chaos theory, for example, is based on the realization that there are certain relatively basic systems in biology, physics, and mathematics for which long-range prediction is impossible.²⁰⁵ The difficulties exposed by chaos theory can be illustrated by calculating the population density of a tiny insect which increases when food is plentiful but decreases during times of overcrowding. Because of a phenomena known as "sensitive dependence on initial conditions,"²⁰⁶ even the slightest errors in calculating the starting density will, over time, lead to extraordinarily erroneous results. Moreover, any change along the way will render the initial prediction meaningless. This is sometimes termed the "butterfly effect," because an act as seemingly insignificant as a butterfly flapping its wings can theoretically change the weather around the world, though of course we can never know in what way.²⁰⁷ The humbling lesson of chaos theory is that such systems are destined to remain unpredictable. As one theorist noted: "We cannot

204. Nash, *supra* note 29, at 157-58. Nash similarly suggests that when an intermediate appellate court panel generates an irrational opinion, the full court should tend to grant en banc review. *Id.* at 157.

205. One should not assume that the rigorous field of chaos theory can be applied directly to fields such as law. Chaos theory is technically defined as "the qualitative study of unstable aperiodic behavior in deterministic nonlinear dynamical systems." STEPHEN H. KELLERT, *IN THE WAKE OF CHAOS 2* (1993). The formal mathematics necessary to a complete understanding of chaos theory can be quite daunting to the non-mathematician. See, e.g., ROBERT L. DEVANEY, *INTRODUCTION TO CHAOTIC DYNAMICAL SYSTEMS* (2d ed. 1989). For an accessible telling of the development of chaos theory, see JAMES GLEICK, *CHAOS* (1987). See generally MICHAEL I. MEYERSON, *POLITICAL NUMERACY* 185-208 (2002); Edward S. Adams, Gordon B. Brumwell & James A. Glazier, *At the End of Palsgraf, There Is Chaos: An Assessment of Proximate Cause in Light of Chaos Theory*, 59 U. PITT. L. REV. 507 (1998); Mark R. Brown, *Weathering Constitutional Change*, 2000 U. ILL. L. REV. 1091 (2000); Thomas Earl Geu, *Chaos, Complexity, and Coevolution: The Web of Law, Management Theory, and Law Related Services at the Millennium*, 66 TENN. L. REV. 137 (1998); J.B. Ruhl, *Complexity Theory as a Paradigm for the Dynamical Law-and-Society System: A Wake-up Call for Legal Reductionism and the Modern Administrative State*, 45 DUKE L.J. 849 (1996).

206. DEVANEY, *supra* note 205, at 50.

207. See JOHN L. CASTI, *COMPLEXIFICATION* 89 (1994).

blame this failure on the influence of unknown factors, because there are none. It is rather the result of our own terminal inability to measure or represent the present with infinite precision."²⁰⁸

A similarly humbling experience is derived from examining the Heisenberg Uncertainty Principle of quantum physics fame.²⁰⁹ Simply put, Werner Heisenberg discovered in 1927 that it was impossible to determine precisely both the position and the momentum of a subatomic particle, such as an electron, because the light needed to identify the position of the particle alters its momentum.²¹⁰ Thus, the more we know about the particle's position, the less we know about its momentum.²¹¹ Since one needs to know both the position and momentum of a particle to determine where it will be in the future, the Uncertainty Principle indicates that we can never predict precisely the future location of these particles. As Steven Hawking wrote, "one certainly cannot predict future events exactly if one cannot even measure the present state of the universe precisely."²¹² Once again, this is not a failure of human effort but a limitation imposed by nature.²¹³

A final example of such limitation is demonstrated in Kurt Gödel's "Incompleteness Theorem."²¹⁴ In 1928, a leading mathematician of the twentieth century named David Hilbert, issued a challenge to the

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208. Franco Vivaldi, *An Experiment with Mathematics*, in *EXPLORING CHAOS* 33, 41 (Nina Hall ed., 1991).
 209. For an English translation of Heisenberg's discussion of the Uncertainty Principle, see WERNER HEISENBERG, *THE PHYSICAL PRINCIPLES OF THE QUANTUM THEORY* (Carl Eckhart & Frank C. Hoyt trans., 1930). For an accessible and lawyer-friendly description of the Uncertainty Principle, see Laurence H. Tribe, *The Curvature of Constitutional Space: What Lawyers Can Learn From Modern Physics*, 103 HARV. L. REV. 1, 17-19 (1989); see also DAVID CASSIDY, *Heisenberg, Uncertainty and the Quantum Revolution*, *SCIENTIFIC AMERICAN*, May 1992, at 106.
 210. According to Heisenberg, once "the electron has been pushed by the light quantum, it has changed its momentum and its velocity, and one can show that the uncertainty of this change is just big enough to guarantee the validity of the uncertainty relations." WERNER HEISENBERG, *PHYSICS AND PHILOSOPHY: THE REVOLUTION IN MODERN SCIENCE* 47-48 (1958).
 211. See Tribe, *supra* note 209, at 17 ("According to Heisenberg, the more accurately you measure where a particle is, the less accurately you are able to measure where it's going.").
 212. STEPHEN HAWKING, *A BRIEF HISTORY OF TIME: FROM THE BIG BANG TO BLACK HOLES* 55 (1988).
 213. See R. George Wright, *Should the Law Reflect the World?: Lessons for Legal Theory from Quantum Mechanics*, 18 FLA. ST. U. L. REV. 855, 859 (1991) ("[M]athematics or nature itself, rather than our physical disturbance of the system, underlies the uncertainties in the simultaneous measurement of those variables.").
 214. The formal proof can be found in Kurt Gödel, *On Formally Undecidable Propositions of Principia Mathematica and Related Systems I*, in *GÖDEL'S THEOREM IN FOCUS* 17, 30 (S. G. Shanker, ed., 1988). For a non-technical explanation of the Incompleteness Theorem, see DOUGLAS HOFSTADTER, *GÖDEL, ESCHER, BACH: AN ETERNAL GOLDEN BRAID* (1979); MORRIS KLINE, *MATHEMATICS: THE LOSS OF CERTAINTY* 258-68 (1980); MEYERSON, *supra* note 205, at 162-66. See generally Mike

mathematical community. He asked if anyone could create a complete formal logical system, one that would be able to prove or disprove any mathematical hypothesis. Two years later, Gödel proved that no such system could ever be created because within the system envisioned by Hilbert, there would always be true mathematical statements that were unprovable.²¹⁵ Such systems are thus fated to be incomplete. According to mathematician Rudy Rucker, "[o]ur world is endlessly more complicated than any finite program or any finite set of rules."²¹⁶

The same limitations on perfectability that are seen in chaos theory, the Uncertainty Principle, and the Incompleteness Theorem, are inherent in irrational opinions. However, just as these theories do not prevent scientists and mathematicians from making important discoveries and solving difficult problems, neither does the possibility of irrational opinions prevent the courts from resolving most cases rationally. When an irrational opinion does arise, it can be viewed as a lesson in human limitations, a particularly important lesson for judges and lawyers. As one philosopher of science has suggested, "[w]hy not honestly admit . . . fallibility, and try to defend the dignity of fallible knowledge from cynical scepticism, rather than delude ourselves that we can invisibly mend the latest tear in the fabric of our 'ultimate' intuitions?"²¹⁷

V. CONCLUSION

The key to understanding truly irrational court opinions is to recognize the confounding aspects of group decision-making. It is a major mistake to treat "appellate court decisions as if they were the act of a single judge."²¹⁸

Nonetheless, not every problem that afflicts group decision-making in theory will be relevant to our judicial system. As discussed earlier,

Townsend, *Implications of Foundational Crises in Mathematics: A Case Study in Interdisciplinary Research*, 71 WASH. L. REV. 51, 118-19 (1996).

215. In greatly simplified terms, Gödel found a way to put into mathematical notation a version of the "Liar's Paradox." The "Liar's Paradox" involves the sentence, "This statement is false." The problem arises because if we deem the statement in quotes to be "false" then it is by definition true. However, if we term the statement in quotes "true," then it becomes false. Thus, the truthfulness or falsity of the statement cannot be determined. See MEYERSON, *supra* note 205, at 164-65; see also Giuseppe Dari Mattiacci, *Gödel, Kaplow, Shavell: Consistency and Completeness in Social Decision-Making*, 79 CHI.-KENT. L. REV. 497, 515 (2004).

216. RUDY RUCKER, *MIND TOOLS* 247 (1987).

217. KLINE, *supra* note 214, at 316-17.

218. Laura E. Little, *Hiding with Words: Obfuscation, Avoidance, and Federal Jurisdiction Opinions*, 46 UCLA L. REV. 75, 123 (1998) (quoting Post & Salop, *Rowing Against the Tidewater*, *supra* note 29, at 743).

Arrow's Impossibility Theorem will not be a serious source of problem for our courts.

By contrast, group decision-making leads to the unavoidable possibility of truly irrational opinions, those in which a majority of Justices vote that one party prevails on all relevant issues, but that party still loses the case. These opinions stand as testaments, not to individual fallibility, but to inevitable imperfections to which all human endeavors, including our judicial system, are subject.

VI. APPENDIX: ADDITIONAL IRRATIONAL CASES

1. *Kovacs v. Cooper*, 336 U.S. 77 (1949).

A majority of the Justices voted that a state ban on all use of sound trucks violated the First Amendment. A different majority voted that the New Jersey law in question did ban all sound trucks. Nonetheless, the Court found the law constitutional.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does a state ban on all sound trucks violate the First Amendment?</i>	<i>Does the N.J. law ban all sound trucks?</i>	<i>Does the N.J. law violate the First Amendment?</i>
Reed (3)	Yes (3)	No (3)	No (3)
Frankfurter (1)	No (1)	Not Say (1)	No (1)
Jackson (1)	No (1)	Yes (1)	No (1)
Black (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 6-2	Yes 4-3	No 5-3

2. *National Mutual Insurance Co. v. Tidewater Transfer Co.*, 337 U.S. 582 (1949).

Congress passed a law vesting federal district courts with diversity jurisdiction over suits between citizens of states and the District of Columbia. The only two possible constitutional bases for this law were Article I and III. A majority of the Justices voted that Article I did not give Congress this power, and a different majority voted that Article III did not give Congress this power. Nonetheless, a majority of the Court voted that Congress had this power.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does Art I permit Congress to vest diversity jurisdiction over suits between citizens of states and the District of Columbia?</i>	<i>Does Art III permit Congress to vest diversity jurisdiction over suits between citizens of states and the District of Columbia?</i>	<i>Can Congress to vest diversity jurisdiction over suits between citizens of states and the District of Columbia?</i>
Jackson (3)	Yes (3)	No (3)	Yes (3)
Rutledge (2)	No (2)	Yes (2)	Yes (2)
Vinson (2)	No (2)	No (2)	No (2)
Frankfurter (2)	No (2)	No (2)	No (2)
TOTAL	No 6-3	No 6-3	Yes 5-4

3. *James v. United States*, 366 U.S. 213 (1961).

A defendant challenged his conviction for willful failure to pay taxes on funds which he illegally embezzled. A majority of Justices voted the funds must be treated as taxable income, while a different

majority voted that the defendant willfully failed to pay taxes on those funds. Nonetheless, the Court voted that the defendant could not be tried for willfully failing to pay taxes on the funds.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Are embezzled funds taxable income?</i>	<i>Did the defendant willfully refuse to pay taxes on embezzled funds?</i>	<i>Can the defendant be charged with failure to pay taxes on embezzled funds?</i>
Warren (3)	Yes (3)	No (3)	No (3)
Clark (1)	Yes (1)	Yes (1)	Yes (1)
Harlan (2)	Yes (2)	Yes (2)	Yes (2)
Douglas (2)	No (2)	Yes (2)	No (2)
Whitaker (1)	No (1)	No (1)	No (1)
TOTAL	Yes 6-3	Yes 5-4	No 6-3

4. *National Labor Relations Board v. Wyman-Gordon Co.*, 394 U.S. 759 (1969).

The NLRB ordered an employer to provide a list of its employees' names to a union seeking to organize the employees. In an earlier adjudication involving different parties, the NLRB had announced a prospective rule that required employers to provide such a list. A majority of the Justices voted that the earlier rule was invalid as the NLRB did not have discretion to promulgate rules in adjudicatory proceedings. A majority also ruled that without formal rule-making proceedings, such a requirement could not be imposed in the instant case. Nonetheless, the Court voted the employer was required to make the employee list available.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Does NLRB rule, announced in prior adjudicatory proceeding, that employers give list of employees to union bind future employers?</i>	<i>Can NLRB impose requirement that employers give list of employees to union in this case without rule-making procedures?</i>	<i>Must employer give list of employees to union?</i>
Fortas (4)	No (4)	Yes (4)	Yes (4)
Black (3)	Yes (3)	No (3)	Yes (3)
Harlan (1)	No (1)	No (1)	No (1)
Douglas (1)	No (1)	No (1)	No (1)
TOTAL	No 6-3	No 5-4	Yes 7-2

5. *Dutton v. Evans*, 400 U.S. 74 (1970).

A criminal defendant was convicted based in part on hearsay evidence. A majority of the Court voted that the Confrontation Clause is

violated if hearsay evidence which creates "a real risk of impairing the accuracy of the truth-determining process" is admitted. A different majority voted that the evidence in the defendant's case created such a risk. Nonetheless, the Court voted that admitting the hearsay evidence did not violate the Confrontation Clause.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Is Confrontation Clause violated by admission of hearsay evidence which creates a "real risk" of inaccurate fact-finding?</i>	<i>Did the hearsay evidence in this case create a "real risk" of inaccurate fact-finding?</i>	<i>Was the Confrontation Clause violated by admission of hearsay evidence in the instant case?</i>
Stewart (4)	Yes(4)	No (4)	No (4)
Harlan (1)	No (1)	Yes (1)	No (1)
Marshall (4)	Yes (4)	Yes (4)	Yes (4)
TOTAL	Yes 8-1	Yes 5-4	No 5-4

6. *Apodaca v. Oregon*, 406 U.S. 404 (1972).

A criminal defendant was convicted in a state court with a less than unanimous verdict. A majority of the Court voted that a unanimous jury was required in federal criminal trials and a different majority voted that the same standard applies to both state and federal criminal trials. Nonetheless, the Court voted that a unanimous jury was not required in state criminal trials.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Is a unanimous jury required in federal criminal trials?</i>	<i>Does the same standard apply in state and federal criminal trials?</i>	<i>Is a unanimous jury required in state criminal trials?</i>
White (4)	No (4)	Yes (4)	No (4)
Powell (1)	Yes (1)	No (1)	No (1)
Stewart + Douglas (4)*	Yes (4)	Yes (4)	Yes (4)
TOTAL	Yes 5-4	Yes 8-1	No 5-4

* The two opinions of Justices Stewart and Douglas, were both joined by Justices Brennan and Marshall. The relevant opinions are found in both *Apodaca v. Oregon*, 406 U.S. 404 (1972), and *Johnson v. Louisiana*, 406 U.S. 356 (1972).

7. *First National City Bank v. Banco Nacional de Cuba*, 406 U.S. 759 (1972).

Cuba brought suit against a bank regarding a loan. The bank counter-claimed that Cuba seized its property. A majority of the Court found the "act of state" doctrine generally precludes judicial review when a foreign government takes property within its borders. Different majorities also found (i) there is no exception when the Pres-

ident attempts to authorize jurisdiction, and (ii) there is no exception for counter-claims. Nonetheless, a majority found that the Court had jurisdiction.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Can Court generally hear case when foreign government seizes property within its own territory?</i>	<i>Can the President authorize jurisdiction in such cases?</i>	<i>Is there an exception for counter-claims?</i>	<i>Does the Court have jurisdiction?</i>
Rehnquist (3)	No (3)	Yes (3)	Yes (3)	Yes (3)
Douglas (1)	No (1)	No (1)	Yes (1)	Yes (1)
Powell (1)	Yes (1)	Not Say (1)	No (1)	Yes (1)
Brennan (4)	No (4)	No (4)	No (4)	No (4)
TOTAL	No 8-1	No 5-3	No 5-4	Yes 5-4

8. *Thomas v. Washington Gas Light Co.*, 448 U.S. 261 (1980).

An injured worker filed a second worker's compensation claim in Washington, D.C., after receiving an award in Virginia. There were two competing precedents: *Magnolia Petroleum Co. v. Hunt*, 320 U.S. 430 (1943), which had held that the Full Faith and Credit Clause barred a second suit; and *Industrial Commission v. McCartin*, 330 U.S. 622 (1947), which permitted second suits unless the first state had a statute with "unmistakable language" barring such suits. A majority of the Justices voted to overrule *McCartin*. A different majority voted that *Magnolia* should not be overruled. Nonetheless, the Court voted to permit the second suit.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Can an injured worker bring suit in a second state without regard to the Full Faith and Credit Clause?</i>	<i>Does the first state have the right to bar a second suit only by "Unmistakable Language"?</i>	<i>Can this injured worker bring suit in a second state?</i>
Stevens (4)	Yes (4)	No (4)	Yes (4)
White (3)	No (3)	Yes (3)	Yes (3)
Rehnquist (2)	No (2)	No (2)	No (2)
No 5-4	No 6-3	No 6-3	Yes 7-2

9. *Guardians Ass'n v. Civil Service Commission*, 463 U.S. 582 (1983).

A majority of the Court concluded that disparate impact, without proof of discriminatory intent, was enough to violate the regulations promulgated under title VI of the Civil Rights Act of 1964. A different majority concluded that compensatory damages should be available

for violations of regulations promulgated under title VI. Nonetheless, the Court voted that compensatory damages would not be available for violations of regulations promulgated under title VI if there is only a showing of disparate impact, absent proof of discriminatory intent.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Are compensatory damages available for violations of regulations promulgated under title VI?</i>	<i>Is disparate impact sufficient to violate the regulations promulgated under title VI?</i>	<i>Are compensatory damages available for violations of regulations promulgated under title VI if only disparate impact is shown?</i>
White (1)	Yes (1)	No (1)	No (1)
Powell (3)	No (3)	No (3)	No (3)
O'Connor (1)	No (1)	Yes (1)	No (1)
Marshall (1)	Yes (1)	Yes (1)	Yes (1)
Stevens (3)	Yes (3)	Yes (3)	Yes (3)
TOTAL	Yes 5-4	Yes 5-4	No 5-4

10. *Michael H. v. Gerald D.*, 491 U.S. 110 (1989).

The biological father of a child whose mother was married to, and cohabiting with, another man at time of the child's conception and birth, sued under California law for visitation rights. A majority of the Justices voted that a state may not constitutionally deny a hearing on visitation rights to the biological father of such a child. A different majority voted that California law denied such a hearing. Nonetheless, the Court voted that the California law denying the biological father a hearing was constitutional.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Can a state deny a biological father a hearing on visiting child if mother was married to, and cohabiting with another man, at, child's conception and birth?</i>	<i>Does California law permit a hearing on visiting child if mother was married to, and cohabiting with another man, at, child's conception and birth?</i>	<i>Is California law constitutional?</i>
Scalia (4)	Yes (4)	No (4)	Yes (4)
Stevens (1)	No (1)	Yes (1)	Yes (1)
Brennan (3)	No (3)	No (3)	No (3)
White (1)	No (1)	No (1)	No (1)
TOTAL	No 5-4	No 8-1	Yes 5-4

11. *American Trucking Ass'ns, Inc. v. Smith*, 496 U.S. 167 (1990).

The Supreme Court ruled in *American Trucking Association v. Scheiner*, 483 U.S. 266 (1987), that an unapportioned flat highway use tax violated the Dormant Commerce Clause. Subsequently in *Smith*, a majority of the Justices voted that *Scheiner* had been properly decided, and a different majority voted that non-criminal constitutional rules should be applied retroactively. Nonetheless, the Court voted that *Scheiner* should not be applied retroactively.

<i>Author of opinion and number of Justices joining the opinion</i>	<i>Was Scheiner prop- erly decided?</i>	<i>Should constitu- tional decisions be applied retroactive- ly?</i>	<i>Should Scheiner be applied retroactive- ly?</i>
O'Connor (4)	Yes (4)	No (4)	No (4)
Scalia (1)	No (1)	Yes (1)	No (1)
Stevens (4)	Yes (4)	Yes (4)	Yes (4)
TOTAL	Yes 8-1	Yes 5-4	No (5-4)